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To Professor Holman
with the compliments of
the Author

May 1916

FROEBEL'S
KINDERGARTEN PRINCIPLES



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FROEBEL'S

KINDERGARTEN PRINCIPLES

Critically Examined

BY

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PREFACE

MR. QUICK, discussing Froebel in his *Educational Reformers*, has said with a charming frankness, "Where I can understand him, he seems to me singularly wise," but "at times he goes entirely out of sight, and whether the words we hear are the expression of deep truth or have absolutely no meaning at all, I for my part am at times totally unable to determine." Probably most students of educational theory — outside the ranks of kindergartners, at any rate — have felt Mr. Quick's dilemma. Amid much that is clearly valuable there is much that is singularly forbidding. Among the kindergartners themselves this questionable element in Froebel's thought has produced division. One wing accepts pretty fully the whole original body of kindergarten doctrine and practice, and opposes any appreciable modification thereof; the other wing consciously rejects in

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greater or less degree certain parts of the original Froebelian doctrine and seeks to improve the kindergarten theory and practice by utilizing the best thought current in the rest of the educational world. The latter group honors Froebel, but looks to the future. The former with an almost religious zeal has all but developed a Froebel cult.

In this general situation, it fell to the writer to conduct a critical study of Froebel with successive classes of experienced kindergarten and primary students. Naturally, opposed points of view manifested themselves with regard to many of the doctrines studied. Out of these conflicts has come this book. It is therefore critical and not historical. It makes no pretense to a complete discussion of Froebel, but confines itself mainly to those disputed points of kindergarten theory which, diversely taken, lead to diverse practice.

The general aim of the book is to help spread the reform of kindergarten theory and practice. Its appeal is accordingly not only to kindergartners and to the general student of educa-

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tional theory, but as well to superintendents and other directors of educational practice. The complete kindergarten reform must be the work of all. Until the superintendent can know and properly value what goes on in the kindergarten, his part in improving conditions will be negligible or worse. The kindergartner herself will prove efficient in bettering affairs in the proportion that she can see and appraise what she does. Until the general student of education can place the theory of the kindergarten into its proper correlation with an all-inclusive educational theory, until that time will the kindergarten exist as a thing apart, ill connected with other educational endeavor. It is strikingly true that during the past quarter century kindergarten reform has gone steadily forward; but a considerable body of kindergartners still stoutly oppose change. So long as their theory remains as it is — an essentially esoteric doctrine formulated in a terminology peculiar to their self-contained group — just so long will that doctrine lack adequate appraisal, and their kindergarten will lack proper co-

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ordination with the primary school. So far as known to the writer no publication hitherto made holds up for consideration the peculiar ideas of Froebel, the esoteric doctrine of the conservative kindergartner. The specific aim of this book then is, first, to make clear to the outsider — to the general educator — just what doctrines Froebel did propose for the kindergarten, and, second, to ascertain what value attaches to these in the light of the best current theory.

If some should feel that the criticism is too largely negative, let it be remembered in connection with the purpose of the book that what all accept demands little discussion. The better side of Froebel has already in larger part been absorbed into the common body of received educational thought; once novel, this now “goes without saying.” It may be added correlatively that the worse aspect of Froebel pervades in peculiar manner his every teaching and presents, moreover, peculiar difficulties of discussion. Adequate treatment must seem an overemphasis. To lessen this feeling for those

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readers who favor Froebel, it is suggested that they begin with Chapters V and VI, and afterwards go to the first.

To avoid the annoyance which many feel at frequent footnotes, the sources of the quotations used in the body of the text are indicated by figures within parentheses placed in the text immediately following the several quotations. Thus (6:29) would mean that the quotation just preceding is to be found on page 29 of the book numbered 6 in the List of References (See page 209). As English translations will be more satisfactory than the German originals to most of my readers, the references are made to the generally used translations; and the quotations are generally given as there found. Whenever, however, either accuracy or clearness has demanded it, the translations have been freely modified or made anew. Such changes are indicated by the asterisk placed by the page number, as (4:36*). For the sake of those who may wish to consult the German originals a Converting Table of References has been prepared (see page 211), by which any page

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reference to the English translation may be turned into the appropriate page reference to the German original.

My indebtedness in the preparation of the book is first of all to my former students, especially to those combative ones that were hard to convince. They compelled me to explore the nooks and crannies of the argument. After them I am indebted for most helpful suggestions to my good friends, Dr. I. L. Kandel, Professor Frank P. Graves, Professor Naomi Norsworthy, and Professor Patty S. Hill. No one of them, however, is to be held in any way responsible for the opinions herein expressed. Most of all I am indebted to my wife, who has not only supplied specific knowledge of kindergarten procedure, but in many other ways has helped me at every stage.

W. H. K.

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**FROEBEL'S
KINDERGARTEN PRINCIPLES**

FROEBEL'S KINDERGARTEN PRINCIPLES

CHAPTER I

THE PRINCIPLES UNDERLYING FROEBEL'S EDUCATIONAL DOCTRINES

Nature as divine. — At the very entrance to Froebel's educational system stands his conception of God. Few thinkers or writers have, in the structure and in the presentation of their systems, made the divine so fundamental. The goal and explanation of education for him is found in God and in the relationship that man and nature bear to God. The note sounded in the opening paragraph of the *Education of Man* appears in every serious effort made by Froebel to present the deeper aspects of his thinking. To some who heard him (8:29) he seemed a pantheist, so intimately did he refer all things to God.

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While Froebel often referred to the world as the creation of God, it was not in our popular sense that he conceived this relationship between the Creator and the creation. To the ordinary common-sense Christian, God made the world originally and still rules it; but the creation exists, as it were, outside of God, and His rulership is rather after the analogy of a man over his contrivances or perhaps of a father over his children. To Froebel, on the contrary, the world and everything in it in some mysterious sense came out of God and still remains in him, just as the common-sense man conceives a thought to come out of the mind and yet be in it. A second illustration, not one of Froebel's to be sure, will perhaps make clearer the thought. In algebra the expression $(a + b)^3$ gives rise to $a^3 + 3a^2b + 3ab^2 + b^3$. In a true sense this longer expression was implicit in the shorter and came out of it; in another phrase, the longer is the manifestation of the shorter. Or yet again, out of the seed comes the full-grown plant, and the latter both constitutes and expresses the real nature and being of the seed. In some such way

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— not exactly, of course, since God is infinite — the world comes from within God and is the manifestation of God; and having this origin and this nature the world itself is for Froebel essentially divine, and is accordingly not evil but good.

In thinking of this, Froebel — somewhat like that early mystic, Plotinus — seems to make three gradations of relationship to God. Matter and physical force form one grade; natural laws, a second; and consciousness, a third. These three, however, are not to be taken as sharply differentiated, but as shading into each other. All things emanate from God, but consciousness, particularly self-consciousness, is most nearly like God; or better, is the most adequate manifestation of the divine nature. Matter and mere physical force came from God also, but they very inadequately manifest him. Perhaps it would be truer to say that they in themselves are hardly intended to manifest him, but rather to make possible, in the finite, the manifestation of God through natural laws and through humanity. “God is the sole source of all things”

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(1:2). "The purpose of all existence is the revelation of God. All existing things are only through and because of the (divine) essence that is in them" (1:151 f.). "The universe appeared, as it were, to be drawn from within him" (5:26). Force and matter are the two "external conditions of form and structure" (1:167), but "force and matter are in themselves inseparably one" (1:168). "In all things there lives and reigns an eternal law. . . . This all-controlling law is necessarily based on an all-pervading, energetic, living, self-conscious, and hence eternal unity. . . . This Unity is God. All things have come from the Divine Unity, from God, and have their origin in the Divine Unity, in God alone" (1:1 f.).

The universal law of development. — From this consideration of the divine element, which constitutes "the essence of each thing," it is but a step to the revelation of this divine essence by means of development. Just as God manifests himself by causing the universe to appear, "drawn as it were from within him" (*die Entäußerung seines Innern*), so wherever the

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divine spark is present constituting the essence of anything, there development takes place; the essence unfolds, disclosing and manifesting the divine nature. "It is the destiny and life work of all things to unfold their [divine] essence . . . to reveal God in their external and transient being" (1:2). "The spirit of God dwells and lives in nature, produces, fosters, and unfolds everything, as the common life principle" (8:29). There is for man, for each plant, for every living thing, one "law by which all things are developed and perfected, have been developed and perfected, and which is supreme wherever Creator and creation, God and nature, are found" (1:20). "There is a certain course and sequence in the development of all things, which the Creator has followed in building up the race, and which the human being must be allowed to follow if he is ever to approach perfection. This course is open to every creature, no matter what the stage of his development may be" (9:172).

The parallelism of all development. — One important aspect of this universal law of de-

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velopment is found in the parallelism that exists between any two instances of development, for example, between man, on the one hand, and organic nature, on the other. "In the clear disclosures of God's spirit in Nature are seen the nature, dignity, and holiness of man reflected in all their pristine clearness and purity" (1:159). So complete for Froebel is the parallel between men and trees that "following these silent, certainly reliable, outwardly intelligible, impersonal teachers, man may not only learn from them with certainty the thing to be done at every moment of life, but, acting accordingly, he will surely satisfy the demands made upon him" (1:159*). "If we seek the inner reason for this high symbolic meaning of the different individual phenomena of nature, particularly in the phases of development of natural objects in relation to the stadia of human development, we find it in the fact that nature and man have their common origin in one and the same eternal

* For an explanation of the use of the asterisk in connection with the reference numbers see page ix.

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Being, and that their development takes place in accordance with the same laws, only at different stages. Thus the observation of nature and the observation of man, in comparison and connection with the facts and phenomena of the general development of humanity, are mutually explanatory and mutually lead to deeper knowledge the one of the other" (1: 160 f.).

From the law of parallelism as here stated, Froebel makes certain educational deductions. These at this point need only be stated; their fuller consideration belongs to the more distinctly educational portion of the book. The doctrine of the recapitulation of the moral history of the race by the individual is for Froebel essentially but a special case of the parallelism of all development wherever found. "Child development requires the same series of steps for the religious life as is found in the development of the human race, — that is, it must be done as God himself has conducted the education of the human race" (8: 190*). A further instance of the law of universal parallel development is the doctrine of "correspondences,"

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that is, "the analogy that prevails in the universe between spirit and body and between thought and its embodiment" (8:212). This is often, and perhaps properly, presented as more fundamental than what I have called the general law. If we were more concerned to trace origins, it would be proper at this point to show that this doctrine of "correspondences" (to continue the ordinary kindergarten designation) is Schelling's fundamental advance upon, or differentiation from, Fichte. Fichte had outraged common sense in making the ego create the universe; Schelling, by the parallelism of spirit and nature, sought to avoid so unacceptable a doctrine. Froebel, while caring little for philosophy as such, nevertheless adopted Schelling's notion, using the parallelism of mind and nature as the basis of his educational symbolism, which together with its correlative psychology, will later prove to be a fundamental doctrine in the theory of the kindergarten.

The meaning of development. — We have so far spoken of development or unfolding, as

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if the meaning of this term were by consent of all uniquely fixed. Such, however, is not the case. The use of the word development shows a wide range of meaning. Some writers will speak of *developing a strong character* in a child, although they hold that this can be done only through habits enforced on it from without. Others will restrict development to the disclosing, through unfolding growth, of what had from the first been present, though in a latent form. Still others will pursue a middle course and consider that the term development is properly applied to the outward shaping and defining of original inner tendency. We are not at present concerned to ask which use of the word is proper, nor which concept best fits the facts. We do wish, however, to ascertain Froebel's idea on this point, especially so, as certain important educational doctrines depend upon his specific interpretation of the theory under consideration.

In Froebel's time the old biological doctrine of "preformation" was still common, namely, that the germ contains the adult form in minia-

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ture. Thus Oken¹ held that the "perfect seed is the whole plant in miniature with root, stalk, and leaf" and "in the embryo the whole animal already resides in miniature as does the plant in the seed." That Froebel understood Pestalozzi's educational doctrine of development in the preformation sense seems fairly clear. "All the child is ever to be and become, lies — however slightly indicated — in the child and can be attained only through development from within outward" (1: 68). "The new-born child is not merely to become a man, but the man already appears and indeed is in the child with all his talents and the unity of his nature" (4: 49). A still more interesting aspect of this

¹ Lorenz Oken (1779-1851), a German naturalist, was the head of the school of "natur-philosophie." Kant had set German thought upon the a priori road. Fichte followed with his *Wissenschaftslehre*, in which he aimed to construct a priori the foundations of knowledge. Schelling extended the method, paying particular attention to the realm of nature. Oken in 1802 published his *Grundriss der Natur-philosophie*, which with later publications put him at the head of this bizarre movement. If this were the proper place, it would be both easy and interesting to show that Froebel, in so far as he was scientifically inclined, belonged to this school. That he got from Oken some of the most mystical and repellent elements of his thinking is almost as evident.

The two quotations given in the text are taken from Tulk's English translation, *Elements of Physio-philosophy* by Lorenz Oken; the first, § 1578; the second, § 2332.

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doctrine is found in an apparent assertion that certain ideas, which later are to appear, are slumbering in the child: "How could such antitheses¹ . . . which only come into the comparing, considering, mature thinking mind, even exist in the child's dreamlike condition? We repeat here once more what we have already said elsewhere, Did it not lie in the child, did it not live and work in the child, did it not already define the child's life, it could by no means come out from it at a later period" (4:94*). This doctrine of innate ideas slumbering from the beginning in the child's mind is of prime importance to Froebel in the psychology of his kindergarten gifts and occupations; while the general doctrine of development in the pre-formation sense underlies the whole of his educational thinking.

The doctrine of inter-connectedness.—Inter-connectedness is another favorite doctrine with Froebel. That all things show an inter-connectedness and organic unity consequent upon their origin and continued existence in

¹ See footnote, page 61.

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God, is a theme most frequent on his lips. To the superficial observer, indeed, nature may appear "as a diversity of many and separate individualities without definite inner living connection"; in fact, however, "these externally distinct and separate individualities are organically united members of one great living organism, of one great intrinsically and spiritually coherent whole" (1:165). This organic connectedness was conceived by Froebel under several aspects, all of which, to be sure, are but different ways of looking at the fundamental doctrines borrowed by Froebel from Schelling. Since God is a unity and since to Froebel all development is but the unfolding of the divine essence, it follows — in his opinion — that the whole of the Unity works efficiently at every point in the process. This was considered to hold as well of the smaller subordinate unities of the one great Unity. "The essential nature of the whole plant lies in some peculiar manner in each individual part of the plant" (1:195). "As the germ bears within itself the plant and the whole plant life, does not the child bear

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also within himself the whole man and the whole life of humanity?" (4: 62). "Does not the whole tree life — indeed, the whole vegetable life — work already in each germinating seed of the tree? So, also, in each active child, in each activity of the child, works already the totality of the man's life, — indeed, of the life of humanity" (4: 94*). This aspect of inter-connectedness, the doctrine of the *Gliedganzen*, seems to be the foundation of Froebel's conception of the relation of the individual to society.

Another line of inter-connectedness found in the notion of development lays the foundation for Froebel's symbolism. If development is merely the disclosing of what had from the first been latently present, then the early stages of any process of development give intimation of or "point to" the latter stages of the same. Since development is universal, there will everywhere be found "anticipations" and "premonitions." "As the life of man in all the necessary variety of its phenomena is in itself a complete unity, one can recognize and consider even in the first baby life, though only in their slightest

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traces and most delicate germs, all the spiritual activities which in later life become predominant" (4 : 30). And again, since all development is parallel, the corresponding stages must "point to" each other; that is, the first stage of any one development has a significant relationship with any other first stage wherever found. This type of inter-connectedness when joined with the doctrine of "correspondences" forms precisely the basis for Froebel's symbolism.

The "law of opposites." — Everything discussed so far in this chapter is dependent upon one or both of two general notions: first, that the universe in general, and each several organic entity in particular, is divine in essence; and second, that this divine essence always struggles to manifest itself by unfolding outwardly what had from the beginning been enfolded inwardly, all the unfoldings following the same law and consequently showing the same characteristics. The universal law itself, according to which Froebel conceived the unfolding to take place, next demands our attention.

"Development is due to the reconciliation of

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opposites through the link of mediation ” (6 : 298). “ In all the phenomena of life, there is a connection of antitheses or mediation of opposites ” (4 : 192). “ In nature and in life a third connecting appearance always shows itself between two purely opposite appearances ” (4 : 232). “ The law of connection is the fundamental law in the universe ” (5 : 31). The reader acquainted with philosophy will recognize this as the thesis, antithesis, and synthesis concept of Fichte and Hegel. Froebel in fact occasionally uses this formal terminology (*e.g.* 8 : 223) ; but when the connection of his doctrine with those of the two philosophers was pointed out to him, Froebel is quoted as saying : “ It is both of these and yet has nothing in common with either of them ” (1 : 42). We are not concerned, however, with the philosophic aspect of Froebel’s law, but only with its educational application. The references to the educational doctrine are almost innumerable ; for Froebel felt, as he himself said, that the law was fundamental : “ The whole meaning of my educational method rests upon this law alone. The method stands

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or falls with the recognition or non-recognition of it" (8:228). It will suffice at this time to present two illustrations of the working of the law, and leave its further elucidation to the next chapter. "Everything . . . comes to be known only as it is connected with the opposite of its kind" (1:42). One thus can know *hard* only in connection with *soft*; the two concepts must emerge simultaneously. Again, "the sphere and cube are pure opposites. . . . The law of connection demands for these two opposite yet like bodies . . . a connecting one, which is the cylinder" (5:204). From this consideration the cylinder was added to the "gift" series.

Summary of the chapter. — In general terms the more fundamental conceptions which underlie Froebel's educational doctrines are as follows: (i) The conception of God as the source and essence of the world as a whole and of each several organic thing in the world; (ii) development as the universal law whereby the divine essence makes manifest and explicit what was from the first implicit; (iii) the similarity and parallelism of all instances of development

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wherever found; (iv) the doctrine of "correspondences" or the analogy everywhere subsisting between "spirit" and body; (v) the scheme of connections which run throughout the world as a result of the foregoing; (vi) the doctrine of the *Gliedganzen* or member-whole, that the whole works in each part, and (vii) the law of opposities as the method by which the development everywhere takes place. In the succeeding chapter there will be made an evaluation of these principles in the effort to judge of their worth for present-day education.

CHAPTER II

THE UNDERLYING PRINCIPLES EXAMINED

To discuss adequately the general philosophic movement to which Froebel belonged would carry us far beyond the scope of this work. For our purpose even Schelling's system can be left unexamined, although Froebel's connection therewith is most intimate. Indeed, the more philosophical of Froebel's own doctrines we shall not seek to appraise, lest the whole discussion seem thereby committed to some one interpretation of matters about which reputable thinkers have differed. The main attention will therefore be given to those doctrines of Froebel's which affect more directly the practice of education; and criticisms of these will be based as far as possible upon considerations that are generally admitted in current educational thinking.

Was Froebel a pantheist? — At the risk of violating the plan just laid down, it may to some

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prove interesting — if not otherwise valuable — to consider Froebel's conception of the relation of the universe to God. His statements will not appeal equally to all. Some will feel that the more personal aspect of Deity is lost in an all too pantheistic scheme. Others will doubt whether satisfactory scientific explanation can be read into the more or less vague and mystical relationships described in the *Education of Man*. This latter group will ask what scientific relationship is meant by the statement that "the divine [element] acting in each thing is the essence of each thing" (1:2*). An essence, these will say, as here used, is a medieval conception foreign to the modern mind. Still a third group will object that the author has too much to say concerning ultimates, conceptions which in the opinion of this group belong to bygone stages of thought.

Passing by these several groups, let us inquire directly, what did Froebel think about the nature and person of God? The answer is not easy. Some of Froebel's expressions certainly imply the characteristics of a person, a conscious, willing

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intelligence. On the other hand, all personal attributes seem at times precluded. Personality seemed to be implied in such phrases as, "God's fatherly kindness, love and goodness to man" (3:177); "a Father who thinks for us and loves us" (6:255); "God as a loving father" (6:57); "self-conscious . . . unity . . . God" (1:1). This last phrase, "self-conscious," on the face of it points clearly to personality. The others, however, are not so certain. It is very easy for one of a religious temperament to use the popular terminology in trying to describe a force in nature assumed to be beneficent in its effect. Our language is full of anthropomorphisms. Personification is almost inevitable. Froebel undoubtedly had a strong religious bias, which would predispose him to use this popular terminology even if he felt that his interpretation was not the common one. Perhaps too the charge of atheism made during his later life inclined him to emphasize whatever he held in common with other religious people. It is interesting to note within a single passage the assertion of a scientific, even atheistic conception,

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and the immediate translation of this into orthodox terminology: "In nature, in life, and in the phenomena both of nature and of life, the everlasting force of destiny is paramount. We, as Christians, call this the everlasting dispensation and guidance of Providence, and when this coincides with the expression of our inmost thought, we . . . acknowledge in it . . . the voice and the will of God" (6:23 f.). Elsewhere Froebel refers to nature in terms generally reserved exclusively for the religious attitude towards God: "Nature . . . the original fount of all being and life" (5:36), "rest in perfect trust upon nature," "faith in nature," "the feeling of oneness with nature" (6:16 ff.). More distinctly pantheistic is the following: "The same law rules everywhere, the one law of God, which expresses itself in thousandfold many-sidedness, but in the last analysis is one, for God is himself the law" (8:28). In keeping with this are two passages which together come pretty close to merging man's individual consciousness in an all-inclusive divine mind: "The life of all which is manifold and apparently isolated in the

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universe, is, according to its inner nature, single " (5:23); " the Divine Spirit that lives and is manifest in the finite, in man, has an early though dim feeling of its divine origin " (1:25).

In connection with this Froebel's denial of pantheism is interesting. In answer to Froebel's expression of opinion, quoted just above, that " God is himself the law," a bystander said, " That is what people call pantheism." Whereupon Froebel replied: " I do not say like the pantheists that the world is God's body, that God dwells in it as in a house. But the spirit of God dwells and lives in nature, produces, fosters and unfolds everything as the common life principle " (8:29 f.). A dispute about terms does not concern us; but if Froebel had set out consciously to show that he was a pantheist, he probably could not have done better. There need be no hesitation in concluding that in spite of attributing self-consciousness to God, and in spite of frequent lapses into popular religious terminology, the general background of Froebel's conscious theory is decidedly pantheistic, if not pantheism itself.

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Was Froebel an evolutionist? — The doctrine of universal development, which next demands our attention, is one of peculiar difficulty. Cosmic development, or evolution as we more generally call it, is too vast a topic for us to enter upon. Philosophically, evolutionists have divided according as they have held or denied that actual novelty emerges in the process. It seems safe to enroll Froebel among the latter group as holding that evolution merely makes explicit what was all the while implicit; and this we conclude in spite of the fact that specific references — so far as cosmic development goes — are lacking, and in spite of the further fact that Froebel held to the endlessness of the process. He thus speaks of “an eternally progressing diversity in natural developments” (1:6), and elsewhere asserts that “the spirit . . . will continue . . . to unfold itself ever more” (1:157). We are, however, warranted in feeling that Froebel’s whole conscious attitude denies the idea of emerging novelty.

If it be asked whether Froebel believed in the origin of species or, more exactly, in the trans-

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mutation of species, a clear negative may be unhesitatingly given. Such a doctrine seems at every point to lie outside his thought. True enough, he says, that "on this earth alone" there is to be found "a vast series of ascending planes of development" (6: 275). This series, however, if indeed it refers to anything more than man's cultural development, is Aristotelian not Darwinian in its nature. The planes differ in worth because of the different degrees in which they exhibit the spirit of life or consciousness; the higher in no sense spring from the lower. So far as that goes, all come with equal directness from God. An example of this manner of thinking is seen in Froebel's approval (in 1827) of Batsch's teaching (of 1799) "that the skeleton of man should be considered as the fundamental type which nature strove to produce even in the lower forms of creation" (2: 31).

That development is the general law and that "all development . . . proceeds according to the same law" (8: 150) are — if we scrutinize not too closely — now but commonplaces of thought. Froebel belongs here to that group of thinkers

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who in their philosophy anticipated certain general viewpoints later to be established by science. But we should err greatly if we supposed Froebel had in mind as the "one law" such a conception as Darwin's "natural selection." His one law was Fichte's thesis, antithesis and synthesis, which the kindergartners have called the "law of opposites." When we consider that Froebel's "cosmical development of the universe" and his "entire world-process" have in them nothing analogous to an "origin of species," and that for him all "development is due to the reconciliation of opposites through the link of mediation" (6:298); it is evident that we should go astray to number him among the evolutionists in the more ordinary biologic sense. His adherence to Aristotelianism was greater even than that of many of his contemporaries. He was, however, a philosophical evolutionist. Taking the universe as a whole and humanity in particular, Froebel emphasized the idea of a constant rising to ever higher levels. "In God's world, just because it is God's and came through him, something is steadily expressed,

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and it is an unbroken progressive development in and through all things " (3 : 154). " Human history shows the same uninterrupted development as the universe " (8 : 150).

The parallelism of all development. — It was pointed out in Chapter I that in Froebel's opinion " nature and man have their origin in one and the same eternal Being, and that their development takes place in accordance with the same laws only at different stages " (1 : 161). There results from this a " high symbolic meaning of the different individual phenomena of nature, particularly in the phases of development of natural objects in relation to the stadia of human development " (1 : 160). This means that since human development and plant development, for example, are both similarly the effort of the Spirit to express itself through the same laws, the two developments must throw light upon each other ; the corresponding stages must show an immediate analogic connection. The significance of this parallelism is a theme to which Froebel reverts again and again. We have already noted that trees are not only " certainly

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reliable ” but “ outwardly intelligible,” and that man can “ learn from them with certainty the thing to be done at every moment of life ” (1 : 159). Elsewhere Froebel says, “ Whatever we little children ask, you flowers always answer ” (3 : 186*).

It is of course difficult to demand that so poetic a statement as the last shall yield a literal return ; and many would accordingly say that one is lacking either in imagination or in sense of humor to insist on anything further. It would be a mistake, however, to suppose that Froebel intends his statements to be taken in any such imaginative fashion ; they are for him literal scientific pronouncements. At times he uses language sufficiently prosaic to disabuse any mind of the poetic hypothesis. Thus at the end of a long discussion of crystals, he says : “ In the entire process of the development of the crystal . . . there is a highly remarkable agreement with the development of the human mind and of the human heart. Man, too, in his external manifestation — like the crystal — bearing within himself the living unity, shows

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at first more one-sidedness, individuality, and incompleteness, and only at a later period rises to all sidedness, harmony and completeness" (1:173). Similarly, the cube as a crystalline form is "the first general manifestation of the great natural laws and tendencies to represent each thing in unity, individuality, and diversity; to generalize the most particular, and to represent the most general in the most particular; and, lastly, to make the internal external, the external internal, and to represent both in harmony and union" (1:175). It is in view of the foregoing that Froebel concludes: "If, at the same time, we keep in mind that man, too, is wholly subject to these great laws, . . . these considerations will reveal to us also the nature of man, and teach us how to develop and educate him in accordance with the laws of nature and of his being" (1:176*).

If the reader will have the patience to study the foregoing quotations with some care, he will get Froebel's view even better from these unusual statements than from some less forbidding instances. Froebel likes to describe

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development in most formal terminology. "Represent each thing in unity, individuality, and diversity," this is a phrase which repeatedly occurs. "To generalize the most particular, and to represent the most general in the most particular" occurs in one form or another not less than fifty times. "Make the internal external, the external internal" is found in direct or indirect form more than one hundred times. Such formulations Froebel calls "great natural laws." The ease with which he could find illustrative instances of such formal "laws" seemed to Froebel proof of their validity; while in fact it works to the contrary. Two extreme cases of "making the internal external" will illustrate the point. First, a child in play builds a block house in order that "his inward desire may also appear externally" (5:59) — a confusion of result with purpose, but let that pass. Second, early animal life had its bony structure outside and its flesh inside, as in the crustaceans; later animals have reversed this, putting their bones inside, and the flesh outside; "what in lower forms was external is

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now internal " (1:197). To include such diverse instances under one law is more like punning than science; yet it is thoroughly characteristic of Froebel.

With this attitude of mind Froebel seeks analogies between man and lower nature. Consider the case of the crystal quoted above. Incompleteness, he says, is characteristic of the early crystalline form and of the child, while harmony and completeness are characteristic of the later crystalline forms and of the fully developed man. The analogy as stated may be true, but what new light or suggestion has come from the crystal. Immaturity was first thought of in man, and later found in the crystal. So in general, where nature is said to throw light on man, a trait is noted first in man, then read into the lower form, and finally retraced in man himself. This practice appears in almost every one of the well-nigh innumerable instances of analogy and symbolism. Consider the parallelism of man with trees. In what sense can it be said that we learn our duty from the trees? Only if we have already generalized our notion

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of man's duty to such a degree that we can see some analogy between the tree's struggle and man's struggle. But again the thought has moved from man to the tree before it moved from the tree to man. The parallelism is a specious affair, and well illustrates the working of Froebel's mind.

The doctrine of "correspondences." — Another form of the parallelism of development is the so-called law of "correspondences," the doctrine that mind or spirit and nature are parallel manifestations of God. Schelling advanced the doctrine to account for the agreement between thinking and its objective counterpart in nature, a problem which proves very difficult to many philosophic schools. If, to avoid philosophic controversy, we make no special assumptions in the premises, we shall have no objection to admitting the existence of at least a working agreement between any valid thought and its object. The objection comes in when the agreement admitted in such cases is carried over into another realm in such manner as to give some sort of metaphysically exis-

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tential relationship to mere analogies. Froebel seems constantly to feel, though I have found no specific assertion of the position, that there is some intrinsic, absolutely existent connection between the ball, for example, and unity; as if the ball must inherently symbolize unity. Such an absolute symbolic character is necessary before the symbol can for Froebel waken to consciousness the thought germs which are assumed to be slumbering in the child's mind. The discussion of this practical bearing of the doctrine of "correspondences" will be given in Chapter III in the treatment of symbolism. Here is it perhaps sufficient to say that no one outside the ranks of the traditional kindergartners accepts Froebelian "correspondences."

Inter-connectedness. — The law of inter-connectedness, while largely a corollary of the preceding laws, demands separate treatment; partly because it is more general than they, and partly because it has a larger number of practical bearings. Further, it carries added interest because it furnishes some of the most bizarre of Froebel's teachings. In general this law in-

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cludes all manner of connectedness whatsoever that can subsist between any two things in the universe. In a narrower sense, it includes all those connections which arise from the operation of any one law. If any specific law be conceived as cause — and Froebel seemed so to conceive natural laws — the several common effects of the law wherever found would furnish instances of inter-connectedness. In this narrow sense of causal connection we can accept with little or no modification the dictum of Froebel that everything should be taught in its connections. If this were all, there would be no need of discussion.

Froebel's science, however, is not always above reproach, so that some instances put forward by him as serious cases of valuable inter-connections would to-day not carry weight. Most interesting of these perhaps are his studies of language. His most loyal followers, even those who speak with respect of his crystallography, are forced to regret Froebel's incursions into the field of philology. His general position is this: "All the laws of the inner

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and outer world, collectively and singly, must be revealed in language, must lie in language itself " (1:211).¹ Following this general statement is a more specific one which is evidently intended to supply the basis for his plays on words: " In spite of . . . imperfection and fragmentariness of our experiments and knowledge, however, we cannot repress the conviction, corroborated at every step, that in every language — primarily in our mother tongue (German) — the sounds and letters in their combinations express definite and fixed mathematical, physical, physico-psychical laws, resting on inner necessity; that the representation of an object, . . . necessarily demands certain sounds and letters and no others, so that each word is the necessary product of certain word-elements, just as each material chemical product is the result of the combination of certain determinate elementary substances " (1:213). Thus " the word ball, in our significant language, is full of expression and meaning, pointing

¹ It may be remarked that the assertion contained in this quotation is an instance of the law of the *Gliedgesetze* later to be discussed.

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out that the ball is, as it were, an image of the All (*der B-all . . . ist ein Bild des All*)” (4:32). Similarly the eight one-inch cubes when placed in the form of a two-inch cube — whence they were derived in the gift series — say, “as it were, silently and always anew to the inventor and observer ‘*Hab’ acht! hab’ acht!* Take notice! take notice!’” (4:131*).¹ Elsewhere Froebel speaks of this latter pun as “a higher insight into language” (5:211).

Closely related to the puns are other linguistic instances of the law of connectedness. “It was more particularly a deep philosophical (*höhere physikalische*) view of language which eventually absorbed my thoughts. . . . It seemed to me that the vowels . . . resembled, so to speak, force, spirit, the (inner) subject, whilst the consonants symbolized matter, body, the (outer) object. But . . . one perceives within the sphere of speech-tones the two opposites of subject and object. For example, the sound *i* depicts the absolute subject, the center, and the sound *a* the absolute material object; the sound *e*

¹ *Hab’ acht* means “have eight” as well as “take notice.”

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serves for life as such, for existence in general ; and *o* for individual life, for an existence narrowed to itself alone " (2 : 98 f.). Similarly elsewhere, " although the laws to which letters owe their origin and development have become obscured, the little that is left of their first rudiments seems to point unequivocally to an inner connection between the form and the meaning — *e.g.* the letter *O* as symbol in the word for the idea of absolute self-limitation, and the letter *S* as symbol in the word for the idea of a return to self " (1 : 223 f.).

One of the most mystical instances of interconnectedness is seen in number. " Arithmetic (*Zahl*) may be considered, firstly as the outward expression of the manifestation of force " (2 : 100). More specifically, " number . . . is determined by the external manifestations of the directions of inner energy " (1 : 203). The number five in particular " comes fraught with remarkable symbolism and significance " (1 : 190). " As developed under the influence of life force, it is truly the number of analytic and synthetic life, representing reason, unceasing

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self-development, self-elevation ” (1:192). In fact, “ wherever the number five appears, there is unmistakable evidence of a higher phase of life ” (1:193). Thus “ all kernel and stone-fruit trees, and all plants which belong to this family, express the number five in their blossoms, as though the special enjoyableness of these fruits lay in their law of the number five running through them ” (3:160). To portray the significance of this number, in the Mother Play book a picture is given to the family of the five fingers, in which one wears counting the number of fives: five people, five deer, five rabbits, etc., etc. Certainly twenty-five separate groups of five appear in this one picture. When it is recalled that the orthodox conservative kindergartner believes that these symbolic pictures have therein pedagogic effect, the limit of mystic credulity seems surely found.

We may conclude this topic by putting into words what has doubtless already been in the reader's mind, namely, that whatever else may be true of Froebel, his sense of humor was

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lacking. On no other basis could these absurdities have been published. And, indeed, the failing is characteristic of the man. We shall have occasion from time to time to point out instances where a principle, good or at least plausible if kept within bounds, has been pushed to absurd extremes. Man might, conceivably, get a hint from the tree life as to the nature of his own struggle for existence; but this is far from saying that from the tree he can learn "with certainty the thing to be done at every moment of life." There are laws explaining the presence of certain letters, "Grimm's law" for the mutation of consonants, for example; but to speak of the "i sound as depicting the absolute subject" and "the letter o as symbol in the word for the idea of absolute self-limitation," — these things and the puns and the symbolic significance of the number five! Inter-connectedness can go no farther.

The member-whole relationship. — The doctrine of the *Gliedganzen* furnishes yet another instance of how Froebel could hold to a good doctrine and at the same time base it on an

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untenable principle. By *Gliedganzen* Froebel means that each member repeats or mirrors, in some sense, the whole to which it belongs. This would be true of man as a member of society and of a leaf as a part of a plant. Within limits the *Gliedganzen*, member-whole concept, furnishes a fairly correct statement of the relation of the individual to society; carried to the extreme, it becomes difficult of understanding, and impossible of acceptance. First on the social side: "How and through what is this feeling awakened on the part of the child of his twofold relation as a part-whole? . . . This feeling is awakened by almost all that is done for or with the child. In manifold ways he feels and sees himself (especially through his oppositeness to grown-up people) as a particular and individual thing in contradistinction to the general and collective. But . . . while with his parents . . . or at least in company of real educators . . . the child soon feels an invisible but uniting bond, which embraces all grown-up people" (5:6). "At its entrance into the kindergarten the child enters into a manifoldly

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new relation of life, . . . first of all into relations with a number of companions, and with those companions as individual parts of a whole, but he is himself also a part of this whole, and as he has gained or lost from the whole, he has also duties toward it" (5:270). As far as these statements go, it would be hard to make better. The individual from one point of view is one, a whole — the very word individual asserts this most explicitly; from still another viewpoint, he is but a part of the social whole, owing to it his origin, his continued existence, and the content of his life. He is in fact a part-whole, a *Gliedganzes*.

But Froebel, in company with Schelling, carries the doctrine farther. "That which lies in a whole lies also in the smallest part of it" (5:174). "The essential nature of the whole plant lies in some peculiar manner in each individual part of the plant" (1:195). "Each successive formation presents the essential nature of the plant in a more subtile garb, until at last it seems clothed only in a delicate perfume" (1:194). Certain blossoms do seem

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to be but leaves transformed, and probably some such fact as this is for Froebel the substantiation of the doctrine; but the origin of the doctrine is older than Froebel's observation of plants, older even than Schelling. The "essential nature" is clearly the medieval "essence," which as species was to the scholastic necessarily present in all the subsumed individual members of the species. "Does not the whole tree life — indeed the whole vegetable life — work already in each germinating seed of the tree?" (4:94). This is a good statement of medieval realism, in which logic and science merge. Every tree is vegetable, and, in this logic, is so by the presence of a certain vegetable essence. This essence must be the same wherever found, so the "whole vegetable life" (in this technical sense) is in the tree. In the same way the tree essence must be in the seed, for — according to this logic — it is the tree essence which present in the seed "forms" the "matter" (soil, etc.) into a new tree of its kind. If now the vegetable essence is in the tree as a part of its specific

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essence, so must the "whole vegetable life," as part of the tree essence, work likewise in the seed. An "essence," in this realistic sense, is unknown in these scientific days, so the whole argument falls to the ground. We may therefore reject without further ado the doctrine that "that which lies in a whole lies also in the smallest part of it." The social aspect of the member-whole doctrine we accept, but not for these metaphysical reasons.

The law of opposites. — It was pointed out in Chapter I that the law of opposites is for Froebel "the fundamental law in the universe" (5:31). Its educational importance was seen in the explicit statement that: "the whole meaning of my educational method rests upon this law alone. The method stands or falls with the recognition or non-recognition of it" (8:228). This very strong assertion is probably justified if we identify Froebel's "educational method" with the gift series and with its use as laid down by him. Whether the assertion is absolutely true can be answered only after a close examination. This will necessa-

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rily lead us into wearisome details; for on this doctrine Froebel's thinking is unusually obscure.

At the outset we find difficulty in stating the law in terms that admit of specific application. In fact Froebel wavers between two somewhat diverse conceptions of the law, without apparent consciousness of his wavering. The following rather definite statement we shall call Case I: "The fundamental law of all advance, development, and cultivation (thus, in general, of all education) is to proceed from any given thing to the pure opposite within this given thing" (5:101). The context illustrates the meaning. A paper square has just been folded along one diagonal, and opened out so as to present this appearance . The question then arises, What step should follow?¹ Froebel himself folds the square so as to make a horizontal line across the middle: . Other instances of Case I as given by

¹ The writer begs that the reader will, before going farther, seek to apply the law by deciding what folding of the paper is "the pure opposite within this given thing." This question has often been proposed by the writer to professed adherents of the law, but they never agree on Froebel's answer.

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Froebel are: "The advance from the undivided is, according to the ruling law of opposites, to the divided" (5:91). Again when Lina is learning to *write*, her mother immediately connects therewith "its opposite," *reading* (5:12). All these applications may be accepted as consistent with each other and in accordance with the law as enunciated in Case I.

But elsewhere Froebel speaks of "the reconciliation of opposites by a mediating link" (6:275 f.); and again of "the conscious application of the connecting third (between each two things, qualities, etc., which are opposite to yet like one another)" (5:31). In the law, as stated in Case I, no mention was made of a "mediating link" or a "connecting third." Here then is a second case (Case II), which directs us as follows: When the situation includes two opposed elements, seek such a third as will reconcile or harmonize the two. The search may be undertaken in hope, for according to Froebel "in nature and in life a third connecting appearance always shows itself between two purely opposite appearances"

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(4:232). Two instances of this Case II will suffice for illustration: The spoken word is "that which is intermediate between the purely internal, invisible thought and the completely external abidingly visible sign (the writing). It unites in itself the nature and properties of both thought and writing, and thus connects them" (5:31). "The sphere and cube are pure opposites. . . . The law of connection demands for these two opposite yet like bodies and objects of play a connecting one, which is the cylinder" (5:204).

So far we have little more than statement and illustration, lying principally within an apparently artificial field of Froebel's own making. We wish, however, to know the use of the law as a general guide to educational thought or practice. It will be convenient to treat the two cases of the law separately. Froebel uses Case I in at least three ways: (1) in teaching such opposed concepts as rough and smooth and the like; (2) in arranging the blocks so as to produce the "beauty forms"; and (3) professedly in ordinary educational procedure and practical

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life situations. We shall take these up in order.

As to the advisability of teaching simultaneously such paired opposite concepts as rough and smooth, hard and soft, and the like, there will be little difference of opinion. If two concepts emerge together in the learner's consciousness — and quite a number do — they should probably receive simultaneous consideration from the parent or teacher. This does not mean that all "opposites" should be so treated, but only such as emerge simultaneously to the learner. It is possible, for example, that the young child may learn *under* better without any reference to *over*, in spite of the fact that the two are paired opposites. While a certain validity is thus granted to the law in this instance of Case I, the law itself probably fails in not discriminating as to which opposites should be so taught and which not. As stated, the law seems to apply to all instances of paired opposites; in practice, it applies only to a portion of these.

Further removed from ordinary school prac-

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tice is the use of the law of opposites to help in the making of "beauty forms." Kindergarten "beauty forms" are those arrangements of the building blocks which are designed to appeal to the esthetic. As usually made, they are symmetric about a center. The blocks are thus put down in pairs on "opposite" sides of the center or of the coördinate axes. Similarly, from any one "beauty form" a second can be made by shifting each block into the "opposite" direction (*e.g.* at right angles to its former position). Froebel counted that these two uses of the law of opposites enabled the children to devise for themselves many such beauty forms. That there is something in this is undoubted, but how much? Are beauty forms got in this way really worth while? The answer seems not difficult. Outside the ranks of the conservative kindergarten no one seems to think the game is worth the candle. No drawing teacher cares to refer to the law of opposites, and progressive kindergartners are abandoning it. Froebel himself is more concerned to symbolize the law by the "beauty

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forms " than he is to use the " beauty forms " for their own sake. Closing a discussion of the subject, he says: " The illustration of this universal law by means of perceptible phenomena is, in our judgment, as important for the heart and soul culture of the child as the . . . inhalation of air from the atmosphere " (4 : 190). The most then that can be claimed in connection with the " beauty forms " is a doubtful utilization of the law in an activity of no very great worth. Evidently this does not go far towards proving the universal validity of the law.

The third and last application of Case I of the law of opposites, namely, to the direction of actual school and life situations, is difficult because Froebel gives so few clear-cut illustrations. We shall consider the three most plausible instances. When Lina is learning to *write*, her mother joins with writing its " opposite," *reading* (5 : 12). Whether this was the sole consideration in joining the two, Froebel does not say. In all probability the law was an afterthought. Looking back on what had been done, Froebel was able to see an instance

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of his favorite law. He deceived himself into thinking that the law had guided him. Wholly different reasons for combining reading with writing are so obvious and so satisfactory that we need not give any weight to the law here. In another instance, Froebel advises the mother to name to her children the activities in which they engage. This will "heighten" the effect. He then adds: "Word and form are opposite, and yet related. Hence the word should always accompany the form as its shadow." He closes the discussion with the words: "Through the name, moreover, the form is retained in memory and defined to thought" (4:191 f.). This is interesting in that Froebel gives a valid reason for naming the activity, both before and after the reference to the law of opposites. It is the more interesting to know that in no less than twenty instances Froebel repeats the same valid reason here given, but only this once does he base the practice of naming the act upon the law of opposites. Thus again it is evident that the moving cause is quite other than the law of

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opposites; again Froebel looked back and found his law present, and was again deceived. A third instance, already referred to, is that of folding the paper square. It will be recalled that the resulting form  was professedly got by the law of opposites. Froebel eventually shows (5:101 ff.) by this figure that the isosceles right triangle is equal to a rectangle of the same base and half the altitude. In this geometrical reasoning, evidently, is found the cause for choosing the unexpected opposite.¹ The conclusion seems irresistible that Froebel folded his square to prove his proposition, and afterwards found that he had used *an* opposite, — I will not say *the* opposite.

Of the three ways of using Case I of the law under consideration, only two disclose any sort of support for the assumed principle, the learning of certain paired opposites and the finding of “beauty forms.” The connection between these two is, however, so slight, so accidental rather than essential, that we cannot call them

¹ Practically every one expects the other diagonal and not the horizontal line.

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instances of one law unless more convincing considerations can be brought forward. Further study disclosed, moreover, greater weakness. Recall the three instances brought forward under the third application. In each of these we refused to believe that the law guided; yet when they are considered in retrospect, there is a seeming verification. But consider any two things soever, they are "opposite" at least in some respect (Froebel's own instances are as far-fetched as any can be). It thus happens that whatever course any one might arbitrarily choose would be "going from one thing to its opposite." All courses whatsoever then equally fulfill the requirements of the law. But a law that presents absolutely no basis for prospective selection is no law at all. For it is the very nature of a law that it tell us beforehand what results to expect according as we act one way or the other. The law of gravitation tells me what conduct to expect of a stone. If I leave it unsupported, it will fall towards the earth. If I support it, pressure will ensue. But what does this law of opposites (Case I)

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tell me? Not one thing. It professes to tell me that I will go right if I choose my course so that opposites be joined. In reality whatever I do will equally join opposites. So far then as Case I is concerned the law has no validity. The teaching of paired opposites gains its validity from certain psychological considerations that must be considered in and of themselves. Similarly what little validity there is to the building of "beauty forms" by this rule is to be explained as the accidental coincidence of the "law" with certain considerations of symmetrical figures. In neither instance do we gain by referring to the assumed law. As a rule for directing general conduct it is worthless.

The discussion for Case II is different. Here we should make "the conscious application of the connecting third between things which are opposite to yet like one another." We could again point out that there are no two things which are not "opposite to yet like one another" (at least within limits no wider drawn than Froebel's own); but other considerations

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suffice. In a certain favorable light, what we have here is an analysis of a problem situation, namely, that where two or more opposing elements make diverse demands upon us, we should solve the problem by some third course or point of view which will reconcile the opposition. This is a very formal sort of affair. Can we get guidance from it? On the face of it, the solution sought would always be some third course, other than the two opposites, which reconciles them. But is this true? Suppose a boy guilty of some fault is debating whether to acknowledge it or deny it, what is the third course which shall reconcile the two opposites of truth and falsehood? Suppose on a journey I reach an unknown fork in the road, what direction will this law give me? It seems true, when a problem has arisen because diverse aspects of a situation have been unwarrantably opposed to each other, that some third point of view will serve to reconcile the opposition. Professor Dewey's treatment of the child and the curriculum in an essay of that name affords an excellent example. Case II of the "law" is

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thus, at best, a formal description of a solution to one kind of problem. To call such a description a law is to mislead, not to help.

It appears then that Froebel was sadly mistaken in saying that he based his educational practice on the "law of opposites." Certain artificial portions of his practice, he did in fact base on the "law," and these accordingly stand unsupported, as we shall later discuss. The vital portions of his education, however, are independent of any such mistaken principle.

Lest any one should feel that we have dealt unfairly with Froebel when we have spoken of far-fetched illustrations, we give a few of the more remarkable :

(1) "This law [of the connection of opposites] is again expressed . . . in the voice sounds themselves, since the sound *o* connects the two purely opposite sounds *a* and *u*, the first of which expresses materiality and the second essence. . . . We cannot combine the *a* with the *u* in the sound of plain *au* without being obliged to use also the sound *o*, so that when we say *au* we actually say *aou*. . . . Language is an organic construction

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of opposites, a whole which is in itself single" (5:33). (2) Having got the building bricks (the fourth gift) the problem arises as to the character of the next gift: "Vertical and horizontal lines are both straight lines. They are also in their directions contrasting lines. Contrasts in accordance with the universal law of development imply mediation. The diagonal mediates the contrasting right lines, and hence is demanded by them" (4:203). The triangular prism is the result. Berkeley somewhere speaks of "a mind debauched with learning." Surely no small degree of mental debauchery would be necessary to make this deduction acceptable. (3) Perhaps the most extraordinary instance of all is found in one of the letters: "You will remember the great value I used to attach . . . to the reconciliation of opposites by a mediating link. I think I can offer you a striking proof of the justice of my views in this regard, drawn from your own life. . . . You know . . . what sharply contrasted opposites we find in North and South Germany. . . . You, dear Luise, are a Viennese, a South Ger-

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man; and the mediating link of my own life has served to connect you with your opposite, Madam Doris Lutkens, a North German, by the most perfect and stable relationship. Then, again, how do you become connected with Madam R. B.? . . . Is there any opposition between North Germany and Hamburg? Perhaps not much: but Madam B. learnt kindergarten principles in Baden, pondered over them a whole month by herself. At last in stony Berlin, the spark kindled into a flame, and she turned towards the North, towards yourself at Hamburg, to satisfy the wishes, the maternal necessities, which had been borne in upon her . . . in the South (Baden). . . . Acknowledge, then, in these occurrences . . . the truth of the kindergarten principle" (6:275 f.).

Summary of the chapter. — With this closes our examination of the more fundamental principles underlying Froebel's educational doctrine. His idealistic philosophy was passed over without attempt at evaluation lest the remainder of the examination should seem to be based on the position there taken. While

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the term pantheism seemed appropriate to Froebel, there were nevertheless departures from such a position in the direction of a more popular belief. As regards the doctrine of development, Froebel was counted not to hold to the evolution of higher biologic forms from lower, which is characteristic of modern post-Darwinian evolution. He did, however, hold to a general cosmic development in the sense that lower forms appeared earlier than higher. He also held that humanity is constantly developing to a higher and higher plane. The parallelism of man and nature which meant so much to Froebel seemed, upon examination, to be relatively insignificant. The doctrine of "correspondences" was granted to have only metaphorical validity, and not much of that. So far as the law of inter-connectedness contemplated the teaching of things in their causal connection with relation to ends, it was granted full validity. Beyond this it tended to be fantastic in the extreme. The doctrine of the *Gliedganzen*, or member-whole relationship, was held to be a good statement of the relation of

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the individual to society, but in other respects either irrelevant or untenable. The law of opposites, which Froebel held to be fundamental to his educational system was, upon examination, found to be little better than a delusion and a snare. The next chapter brings us to a consideration of the psychological doctrines more intimately connected with the educational practice.

CHAPTER III

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HAVING examined the more fundamental conceptions in Froebel's thinking, we may now take a step nearer to his educational practice, and ask what psychological doctrines characterize the system and what validity attaches to them.

The doctrine of development. — In the forefront is found the doctrine of development, already discussed in part. Recapitulation in the moral realm, one aspect of the general notion of development, requires here but few words in addition to what has already been said (page 7). As we saw, Froebel held that "child development requires for the religious life the same series of steps as is found in the development of the human race — that is, it must be done as God himself has conducted the education of the human race" (8:190*).¹ And

¹ The translation given in 8:190 is incorrect. Froebel undoubtedly means here as elsewhere to give expression to Lessing's idea as found in *Die Erziehung des Menschengeschlechts* (1780).

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again, "the observation of the development of individual man and its comparison with the general development of the human race show plainly that, in the development of the inner life of the individual man, the history of the spiritual development of the race is repeated, and that the race in its totality may be viewed as one human being, in whom there will be found the necessary steps in the development of individual man" (1:160). Since Froebel uses this doctrine of moral recapitulation not otherwise than as an instance of the parallelism of all development, we need not here repeat our discussion of that point (see pages 5 ff. above). As to the validity at present allowed to the theory of recapitulation, it suffices to say that most competent writers now find in the doctrine little of value for education.¹

Froebel's belief in innate ideas. — The phase of the doctrine of development which most interests us here is a more or less explicit belief in the existence of innate ideas, though Froebel

¹ For discussions of this point see Thorndike, *Educational Psychology* (1913), I, 245 ff.; Davidson, *The Recapitulation Theory and Human Infancy*.

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does not use this term. This belief of Froebel's was stated in Chapter I, where it was brought out that Froebel took Pestalozzi's educational doctrine of development in the preformation sense. "All that the child is ever to be and become, lies — however slightly indicated — in the child" (1:68). "As the life of man in all the necessary variety of its phenomena is in itself a complete unity, one can recognize and consider even in the first baby life, though only in their slightest traces and most delicate germs, all the spiritual activities which in later life become predominant. . . . If they [the spiritual tendencies] were not contained in the little child, they would not be developed at all from it" (4:30). That Froebel did believe in the presence of certain ideas slumbering in the child's mind seems even more clearly indicated in the following passage: "How could such antitheses¹ . . . which only come into the comparing, considering, mature thinking mind, even exist in the child's dream-like condition? We repeat

¹ Miss Jarvis, influenced by the evident meaning of the context, has actually used the words "contrasted ideas," but I have preferred a more literal translation lest I seem to assume the point I wish to prove.

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here once more what we have already said elsewhere: Did it not lie in the child, did it not live and work in the child, did it not already define the child's life, it could by no means come out from it at a later period " (4: 94*). The reader is asked to note this strong statement, for in the writer's judgment Froebel here said exactly what he fundamentally believed. "Antitheses" which belong normally to "the mature thinking mind," not only "exist in the child's dream-like condition"; but they "live and work in the child," they "already define the child's life," even in "the first baby life," as said above.

The references in Froebel's writings which assume this doctrine are almost innumerable. Such words as "premonition," "anticipation," "presentiment," "dimly perceptible," and the like, all refer to the innate ideas slumbering in the child's mind. The child "destined to consciousness" is "already in anticipation conscious of his nature" (4: 11). "The child must bring into exercise the dim anticipations of conscious life in itself" (4: 31). "The child,

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feeling himself a whole, early seeks . . . even at the stage of unconsciousness, always to contemplate, to grasp, and to possess a whole " (4 : 33). This last quotation is quite characteristic. According to Froebel each person is *ipso facto* a whole, and must upon reaching the state of full self-consciousness recognize that fact. Consequently this fundamental conception, the recognition of his unity, must lie slumbering in the child's mind — else " it could by no means come out from it at a later period." If this be so, the child " even at the stage of unconsciousness " must in some way " feel himself a whole " — this is one of the " dim anticipations " referred to above. Because of this feeling, he must wish " to contemplate, to grasp, and to possess a whole." This " dim anticipation " must be brought " into exercise " ; accordingly he must be allowed some " whole " to play with, by which Froebel here means the ball. The full significance of bringing " into exercise " the " anticipation " will appear in the later discussion of symbolism.

Some instances of Froebel's innate ideas are

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particularly interesting. Among these the anticipation of unity plays an important part. In the "child's first clear gaze, . . . he anticipates the future (though as yet deeply slumbering) unity of life" (4:29). "A deep and significant feeling of anticipation and longing aspiration occupies the boy's mind in all he does during this period. All he does bears a common character, for he seeks the unity that unites all things and beings" (1:126). Symbolically connected with the concept of unity are, in Froebel's mind, the sphere and the circle. These have in his eyes profound interest for the child: "Children are impelled by a certain anticipation and dim ineffable feeling which urges them on in quite a remarkable and special way to the unwearied pursuit of circular action games; these lead them towards a comprehension of the solar system and the orbital motion of worlds" (6:91*). Perhaps the most interesting of all premonitions attributed by Froebel to children is that regarding timepieces. "Children are intensely charmed by everything that is like a clock . . . you would say that as to a watch it is

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the movement, the works, the apparent life." But, says Froebel, "as a rule it is certainly not" this, for children have shown a similar interest in the sun dial, where they saw no movement. My own opinion, says he, is "that at the bottom of this pleasure lies a deeply slumbering premonition of the value of time itself" (3: 139*).

What has modern psychology to say to such a doctrine? Froebel is evidently contemplating the same phenomena that at present we include under the general head of the instinctive. Is the instinct a "deeply slumbering, yet already active presentiment," or must we empty it of this innate content? That there are in the child unlearned tendencies is nowhere disputed; but innate slumbering ideas — what of them? The nearest to this that we can admit is found in those instincts which under ordinary conditions lead to the formation of certain correlative general ideas. Thus, what has been called "the instinct of 'pleasure at being a cause'" will under favorable conditions lead to experiences, partly individual and partly social, which

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will in turn lead normally to some conception of "the law of causation." That we have such instincts and that they may under the suggested conditions eventuate in certain predictable conceptions may be freely admitted; but we must as truly deny that these general ideas already "live and work in the child," "already define the child's life." Fortunately for our ease of discussion Froebel so described and illustrated his opinion that we have no difficulty in appraising it. The child's interest in timepieces does not spring "from a deep-slumbering premonition of the value of time itself." No guess could be wider the mark. Nor has the child's interest in "circular action games" anything to do with an innate anticipation of "the orbital motion of worlds." Nor does the child's desire for the whole of anything before him have any connection with a dawning metaphysical interest in a "whole." Such "premonitions" and "anticipations" modern psychology rejects with scorn and derision.

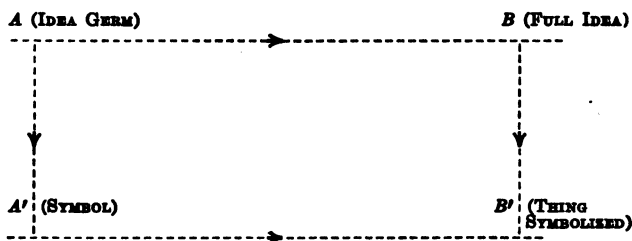
The doctrine of symbolism stated. — Froebel's psychology of innate ideas and their unfolding

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is nowhere more clearly seen than in his doctrine of symbolism. The importance of the topic will justify a detailed consideration of the argument. An illustration of typical symbolism may help us to get Froebel's idea. Suppose the adult is to have the full concept of the orbital motion of worlds; then by the law of development the germ of this idea must at birth lie slumbering in the child's mind, and this germ must soon show some "anticipations" or "premonitions" of this concept. Again as by the law of "correspondences" the adult concept "points to" or expresses the actual fact of orbital motion, so must the germ in the child's mind point to or correspond with some analogy or likeness (symbol) of the orbital motion, say, running around a circle. "Children are impelled by a certain anticipation and dim ineffable feeling which urges them on in quite a remarkable and special way to the unwearyed pursuit of circular action games; these lead towards a comprehension of the solar system and the orbital motion of worlds" (6:91*).

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A diagram may help us to criticize this doctrine.



For Froebel, the psychology of symbolism assumes four elements related in the following manner. The child has the germ (A) of a certain idea or concept which the adult is later to have in full consciousness (B). This concept (B) relates to a certain counterpart (B') which is symbolized by some object (A') lying within the child's range of possible experience. There is indeed for Froebel a fifth element pervading the other four, giving to each its essence, constituting their correlation and mutual interactions — namely, the “spiritual” essence which is assumed by Froebel to underlie all phenomena. When these relations hold, then (i) the germ (A) reaches out toward A' in such a way that the child becomes interested in ap-

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propriating or using the symbol (A'): and (ii) the resulting activity with the symbol (A') serves to "awaken" the concept germ (A), which then develops towards full consciousness (B). In the instance given just above, A is the slumbering notion of orbital motion, which as germ is destined to develop into B , the perfect concept of orbital motion. A' is movement in "circular action games" which symbolize actual orbital motion (B'). Under these circumstances (i) the child in obedience to the stirring of A is "impelled" to engage in the circular action games (A'), and when the games are actually engaged in, (ii) the activity "awakens" the yet unconscious germ (A) which then takes on more of consciousness as it develops towards a full "comprehension (B) of the solar system and orbital motion of worlds" (B').

Another instance of symbolism may make the idea clearer.

"The child loyal to its human nature — at whatever incomplete and dim stage of observation it may be — perceives in the ball the general expression of each object as well as of itself as

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a self-dependent whole and unity. . . . The child, feeling himself a whole, early seeks and must seek in conformity with his human nature and his destiny, even at the stage of unconsciousness, always to contemplate, to grasp, and to possess a whole " (4:32 f.). All four elements are here present. *A* is the germ back of and in the child's "feeling himself a whole." *B* is the full adult consciousness that he is himself "a self-dependent whole and unity." *A'* is the ball which symbolizes each such whole (*B'*). From this it follows (i) that the child, "even at the stage of unconsciousness," seeks the ball, and (ii) activity with the ball brings the slumbering idea germ to consciousness. "The child likes to employ himself with the ball even in early life, in order to cultivate and fashion himself, though unconsciously, through and by it" (4:32).

The two instances given are not as explicit as might be desired in asserting that play with the symbol awakens the slumbering idea germ. Other references supply this deficiency: "These images wake the soul-germs. . . . The still un-

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thinking mind of the child can be awakened and taught only through symbols" (8:8).¹ "The child's mind unconsciously seeks, must seek, according to its organization, for the conditions upon which its development depends. He finds these conditions, and by degrees fulfills them by the help of the things surrounding him" (8:212).

The doctrine of symbolism examined. — A careful study of Froebel's symbolism will, I believe, convince any candid inquirer that the analysis above given is an accurate statement of Froebel's predominant conception. The question next confronts us as to the validity of this psychology and of its consequent educational procedure. Four distinct inquiries present themselves :

(i) Is there present in the child's mind a germ (*A*) which is to unfold into the concept (*B*)?

(ii) Is there such an inherent connection between the symbol (*A'*) and the thing signified

¹ This quotation is a formulation made by Baroness von Marenholtz-Bülow, but approved by Froebel (8:7).

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(*B'*) that the symbolism can affect the child in advance of any experience of the thing symbolized?

(iii) Does observation support the belief that the child's mind and interest (*A*) seize upon the symbol (*A'*) because of its symbolic connection with the thing signified (*B'*)?

(iv) Does observation support the belief that activity with the symbol (*A'*) awakens the idea germ (*A*) into fuller consciousness?

We have discussed already the first query, and have seen that modern psychology rejects the doctrine of innate ideas. Logically, then, queries three and four must be answered negatively. We may well hold these two in abeyance, however, until the second has been discussed. And here again we must beg the reader's patience. The way is long and thorny. In order to see how a symbol is connected with the thing symbolized, and what if any antecedent experience is necessary before one can feel the symbolism involved, we must differentiate the several types of symbolism. From a study of symbolism in education for the purpose at hand

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three fairly differentiable types of symbolism appear :

1. *The symbolism of signs.* One thing (the symbol or sign) may be so associated with another that the presence of the symbol (sign) to consciousness calls the other thing to mind. Such association may be (a) between any two things of ordinary experience, as the sugar bowl means sugar to the child, or (b) by connection in literature, as the trident recalls Neptune, or (c) by arbitrary convention, as the letter *b* indicates a certain sound.

2. *The symbolism of imaginative play.* A child "makes believe" that a stick is a horse, and behaves with the stick in some such fashion as he thinks a man behaves with a horse. The symbol — if such a term be fitting — allows in this case behavior on the part of the child similar to that attributed by him to one who possesses the "real" thing. Imaginative play consists of such whole-souled reproductions in miniature of the broader surrounding life. A certain approach to animism often serves to heighten the effect.

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3. *Figurative symbolism.* When an analogy or remote connection is noted or assigned between one thing more immediate or more tangible (more "concrete") and another less tangible (more "abstract"), the more tangible may be said to symbolize the less tangible; as, for example, the lily symbolizes purity.

It is not claimed that these groups are always mutually exclusive, nor indeed that every case of symbolism can be satisfactorily assigned to one or another; still for the purpose at hand these groups may be taken as showing the three typical ways in which symbolism has been conceived in discussions of the educational doctrine.

Let us now consider what kind of experience precedes the perception of symbolic relationship. As to the first type, it is clear that the association must have been made in the mind by experience. The sugar must be known as sugar, the bowl as bowl, and perhaps *pari passu*, possibly later, the two associated in experience. In narration, the same conditions would hold. In the case of conventional connection, the thing symbolized must be at least partially

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known and organized in experience before the symbol (sign) can stand for it. At no time can this symbol (sign) stand for any more of the object than is comprehended in the relationship of knower to thing known.¹

In the "symbolism of imaginative play," the child is stimulated by the thought of the symbolized behavior or by the symbol as making this possible, and responds by his dramatic reproduction in the little of what he conceives the "real" thing to be in the large. He must have some antecedent knowledge experience of the thing represented, else there could be neither stimulation to act nor appropriate direct response. There may result increased clearness of conception with reference to the adult life represented — this must result if the activity be educationally justifiable — but the initial stimulation and correlative response arose from antecedent organization of knowledge experience in the field represented. Here as elsewhere, experience precedes the symbolism

¹ The use of what some have called "potential symbols" is given on page 79 ff.

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and gives to the symbol whatever power it has as stimulus.

The case of figurative symbolism is somewhat more complicated. Several steps may be differentiated, though they need not be chronologically distinct. Take the lily as symbolizing purity. There must be some knowledge experience of the lily in a non-figurative connection, including a consciousness of the homogeneity (purity) of its whiteness. On the other hand, there must have been sufficient moral experience for the concept of purity as a virtue to be present, at least partially. Under these conditions the analogy may be felt between the spotlessness of the lily and the moral spotlessness of purity. In the pleasurable interplay of the mind back and forth between symbol and thing symbolized, each may become clearer in its relation, each may be enriched by elements from the other. Evidently in this type of symbolism there must be antecedent experience not simply of the more tangible (symbol), but particularly in the moral or spiritual ("abstract") realm with which the symbolism deals.

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So with each of the three types, the symbolic force springs always from experience — personal knowledge experience of the thing symbolized as well as the symbol itself. The symbolic connection comes always from experience antecedent to the perception of the symbolism. With symbolism as everywhere else, experience precedes perception. The future is suggested only in terms of the past.¹

We are now ready to return to the four inquiries propounded on page 71 above.

(i) Is there present in the child's mind an idea germ, which is to unfold into a fully conscious concept?

¹ The student of comparative psychology might ask whether there are not sign connections made in the brain by heredity, and whether after all this is not what Froebel had in mind, failing to make plain his meaning only because he speaks the language of the Schellingian philosophy rather than that of modern science. Undoubtedly such sign connections are known; the smell of the dog may incite the kitten to spit and scratch, fighting as it were her hereditary foe. And probably Froebel was influenced in his thinking by known instances of such inborn connections. Our question, from this point of view, would be whether there are such innate connections available in the case of man; and, if yes, whether Froebel's educational procedure was such as to utilize them. Both questions may be answered unhesitatingly. While there are in the case of the baby many inborn connections, they are not of a kind to support any practice of symbolism, still less would they support the involved figurative symbolism of Froebel. Chapters IV and V will elaborate the bases for the last made assertion.

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The answer is, no. A concept is an organization of experience for guiding future experiences. In Froebel's sense of a germ (which contains latently what is subsequently to appear), he is mistaken; there are no idea germs in the child's mind. To change the meaning of germ to fit modern psychology is to reject exactly the whole of Froebel's theory on this point.

(ii) Is there such an inherent connection between the symbol and the thing signified that the symbolism can affect the child in advance of experience with the thing symbolized?

The answer is, no. The connection in each case of symbolism is made by and in experience; and the more metaphorical the symbolism, the wider is the necessary antecedent experience.

(iii) Does observation support the belief that an idea germ seizes upon the correlative symbol because of the latter's connection with the thing symbolized or with the concept of this thing?

The answer is a twofold no. There are no such idea germs, and the symbol is not con-

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nected with the thing symbolized in advance of experience in the field symbolized.

(iv) Does observation support the belief that activity with the symbol awakens to fuller consciousness the correlative idea germ?

The answer is, no. There are no such idea germs. Besides in most of the cases cited by Froebel there is for the child no perception of symbolism. For the child such symbolism simply does not exist.

We thus have no difficulty in concluding that Froebel's symbolism, in so far as it postulates innate idea germs and in so far as it assumes a symbolism effective antecedently to experience, is baseless. We found instances of such baseless symbolism in the running games and in the connection of the ball with the conception of a whole. The reader already familiar with Froebelian symbolism will recognize these as in fact typical. Succeeding chapters will show how much of Froebel's educational practice is based upon such symbolism.

“Potential symbols.” — To the discussion just given it is proper to add a word with ref-

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erence to "potential symbols," a measurably defensible use of signs in advance of the experience which is to give the significance. We have a common instance in the fact that a child often hears to advantage a word before he has the experience which must give to the word its proper content. That the unwise use of the practice is a hindrance to the child's mental growth has been for many years a commonplace in educational thought. It is none the less true that within limits a designation for a specific kind of experience given in advance may help in distinguishing and fixing the experience. A child learning to paint has noticed the name ultramarine; when she meets the color, the name already more or less associated helps her to fix in mind this particular shade of blue. More exactly, the word ultramarine was experienced under such circumstances as to show that it referred to color and possibly to a blue. The partially identified name may then remain in mind as a query: Just what kind of blue is ultramarine? A general interest in color work thus may be so directed that when opportunity

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offers, experience definitive of ultramarine is gladly attended to and the definition and connection accordingly the better made.

The proper limitations of this use of "potential" symbolization are implied in the discussion given. Where a child's interest and experience are such as to cause him to seize upon a new term and give to it a partial meaning from the connection in which it was met, he will then normally adopt an expectant attitude with reference to this term and will utilize the opportunity of fixing more definitely its meaning. In a sense, the symbol has preceded and prepared for the experience of the thing signified. More exactly, however, it has been a movement from a partial meaning based on partial experience to a fuller meaning based on fuller experience. Thus explained and thus grounded in normal growth attending interest, the practice is good. When pushed upon a child against interest and in spite of non-apperception, no practice could be more deadly.

The discussion of "potential symbolism" has then but rounded out the appraisal of Froe-

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belian symbolism. It has pointed out in another set of terms the weakness and danger of allowing signs to precede initial experience; it has, finally, indicated the proper function of a sign as partial organization of antecedent experience to serve as guide and controller of subsequent experience. With added experience the sign gains in definition and in consequent efficiency. All of which is but a statement, as far as it goes, of the process of normal mental growth. Certainly no support is here found for Froebel's distinctive symbolism.

Freedom in education. — Closely connected with the doctrine of development, under which symbolism has been discussed, is Froebel's conception of child liberty as a pre-condition of proper education. "Education . . . , originally and in its first principles, should necessarily be *passive, following* (only guarding and protecting), not *prescriptive, categorical, interfering*" (1:7). Taking into account the full context, the argument runs somewhat as follows: "It is the destiny and life work of all things to unfold their essence, hence their divine being." Edu-

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cation is in fact but the process of securing such an *unfolding* of what was from the first divinely *enfolded*. Moreover, the germ contains and is an exact and proper plan of what the adult form should be. Under such conditions, that education is best which fosters most completely the full and unhampered unfolding of the original germ. The business of the teacher is to supply the conditions demanded by the innate plan, and to ward off any influence which might hinder its unfolding. The curriculum consists exactly of those conditions called for by the germ. It is in view of these considerations that education should be "*passive, following . . . not interfering.*" "Indeed," says Froebel, in immediate connection, "in its very essence, education should have these characteristics; for the undisturbed operation of the Divine Unity is necessarily good — cannot be otherwise than good. This necessity implies that the young human being — as it were, still in process of creation — would seek, although still unconsciously, as a product of nature, yet decidedly and surely, that which is in itself best; and moreover in a form wholly

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adapted to his condition, as well as to his disposition, his powers and means" (1:7 f.). This may be taken as a sort of idealized statement of Froebel's chosen position. In accordance with it we should follow the child's wishes because he will choose best. Froebel hastens to say that "nature, it is true, rarely shows us now that unmarred natural state" (1:9*).

Taking together all of Froebel's pronouncements on this topic, it is difficult to lay down one consistent or satisfactory statement of his position. He would hold to the original statement given above if he could; and his departures from it are made only under direst compulsion. It seems, however, that after the kindergarten procedure was devised he at times tends to show more regard for this his latest creation, the son of his old age, than for his first-born. "Without rational, conscious guidance, childish activity degenerates into aimless play instead of preparing for those tasks of life for which it is destined" (8:67). "In the kindergarten they [the children] are guided to bring out their plays in such a manner as really to reach the

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aim desired by nature, that is, to serve for their development. Does it disturb the plant in its growth when the gardener protects it, prunes it, waters it, takes the best care he can of it?" (8:68.) Here Froebel is evidently afraid to "follow" the child at all times lest his "aimless play" not "really . . . reach the aim desired by nature," hence "in the kindergarten they are guided." Clearer love for his youngest born, the kindergarten procedure, is seen in the statement that "the knowledge of the cube form is so important . . . that its form, its comprehension, and its management cannot be too early or too urgently brought before the child" (5:210). He elsewhere states of the same cube that it is "at first only after oft-repeated showing and perception that the child strongly wishes to see its nurse produce now one, now another position of the cube" (4:83). There is a wide range of possible positions between the two extremes of "urgently" bringing an undesired play gift before the child, and believing that the child will seek "decidedly and surely that which is in itself best, and . . . in a form wholly

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adapted to his condition." While Froebel occupies at one time or another all the possible positions, there can be no doubt that in theory he inclines all the time towards the extreme of greater freedom, but in practice, increasingly towards the element of external guidance.

The meaning of development in relation to freedom. — It is quite worth our while to examine the basis of Froebel's belief in freedom. We have already seen that for him freedom is the necessary condition to the full realization of the original divinely implanted germ. If we grant that the child at birth is such a germ as Froebel conceives it to be, then the doctrine of liberty follows as an easy, and perhaps necessary, corollary. What are the facts? Is the child the germ of the man in the preformation sense? As regards the body in its principal outward and visible characteristics, we may answer yes, and accept, in a sense, the corollary of liberty. We can do little if anything with the body besides giving it freedom to grow. The food, sunshine, fresh air, sleep, rest, and exercise, demanded by it (as interpreted, however, by

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our best study of it, not by its immediate inclination), furnish the best regimen for its growth. In the main, the final and good result was contained with a certain uniqueness in the original germ. Our part is to furnish the favorable conditions for its realization.

But when we come to the psychological, the situation is quite otherwise. Here conscious, intentional human guidance and redirection are necessary in far greater degree in order to reach a result fitted to meet the inevitable demands of life. We may take two cases as typical of all others, to show the part necessarily played by society in "developing" the child. A baby's prattle contains many varied sounds; some one of these will by chance approximate "*mama*." This sound will be noted by the mother, and the child will receive approval accordingly. The repetition of this satisfaction with the accompanying disregard of the "mere prattle" will fix the word as one of the child's accomplishments. Now this word evidently came from the child's original stock of tendencies; in this sense it has been "developed." But it

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was not uniquely contained in that stock. It survived from among very many possibilities; all of which were equally contained in the original stock. In a true sense, there was a struggle for existence among these many babbling sounds. The word *mama* survived through no intrinsic worth or merit in it, but solely by reason of outside selection. This is what "development" means in this case. Nature furnished a variety of possibilities; society selected the one suited to its purpose. In this way any language, as English or French, is "developed" from the child's native stock of responses; but clearly we cannot say that either language or any language was present in that original stock.

The second instance shows the action of social disapproval, the psychology, however, being much the same in both cases. A child has, among other reactions to an annoying situation, that of anger. The careful parent sees to it that this reaction is left unsatisfied, at the same time satisfying other more approved forms of reaction. By the law of habit formation, this rejected reaction tends to be called into play

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less often, until in the "well-bred" person, anger has small place. Here anger was contained in the original stock—probably as a very strong natural predisposition—but was not allowed to reach its maximum possible strength, because in existing social conditions the child was counted to be better off without it. These two instances may be taken as typical of all learning, and consequently of all "development" in the mental and moral realm.

To sum up the whole discussion, the word "development," as applied to the child, covers a wide range, the extremes of which while differing perhaps only in degree can still be easily differentiated. At the one extreme, the bodily, are certain elements so fixed in the original germ that they will, if permitted by passively favorable conditions, unfold with a minimum of guidance into their full and proper realization. Such, for example, are all those things that distinguish man as an animal from other animals. So far as these are functional, they are concerned, largely at any rate, with our survival on the animal plane. According to

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biological evolution, the elements at this extreme represent our oldest inheritance. At the other extreme are those elements, and their arrangement in our psychical make up, which have to do with adaptation to the most recent part of our social inheritance. The latter elements have been fixed in our several individual characters by the action of our social environment in selecting from among our native reactions those which best fit us to utilize and control this environment. At the one extreme, "development" is an outward unfolding of what was from the first uniquely (relatively so, at any rate) implicit in the germ. We may say of this that the directing agency in the growth, for ordinary environments, is within the germ. At the other extreme, "development" means no more than that the growth has been at each successive stage derived from the preceding by an outward selection and elimination. Of this, it is misleading to say that the outcome was implicit in the original stock, unless we at the same time make clear that the actual outcome is simply one of very many possible outcomes

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which owes its priority and survival solely to some outside agency. Of this same extreme, we may in a sense say that there are successive stories of selected reactions in the structure of our mental houses. The bottom story is nearest to original nature, the topmost story shows most of the external element. Between the two extremes herein differentiated both nature and nurture enter in a degree determined by proximity to one or the other of extremes. "Development" is thus a word of shifting meaning when applied to the genesis of human beings, the element of external selection constantly increasing the farther away we get from mere bodily growth.

On the basis of this discussion, it is easy to criticize those who insist that "education is a development from within." The assertion is ambiguous. If, however, as with Froebel, it is asserted that "the new-born child is not merely to become a man, but the man already appears and indeed is in the child with all his talents and the *unity* of his nature" (4:49), then the ambiguity is resolved, and the assertion

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is unjustified and misleading. It is not true in the sense in which it was meant to be taken. Further, we have no difficulty in appraising a doctrine of liberty based upon the doctrine of development. If reference be had to bodily growth in the matter of gross anatomy, liberty should prevail. To bind the feet or head can probably result only in harm. If reference be had, however, to the building of a character suitable for present conditions of civilization, then we cannot allow that the element of selection lies entirely within the child. To affirm this is to reject the worth of the social environment. A purely "following" education would lead either to mere brutism or to barbarism and anarchy.

Before leaving the doctrine of development entirely, we may instance one respect in which the original nature furnishes most valuable guidance to those who have in hand the education of the child. Since original nature shows wide individual differences and since our social structure calls for differentiation of function (division of labor), we may unhesitatingly

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approve the utilization of natural individual preference in the endeavor to find suitable life work for the individual. Such utilization wisely directed undoubtedly makes for greater individual happiness and for greater social efficiency.

A suggested doctrine of freedom. — The word utilization as used above furnishes the key to the solution of the problem of liberty — at least from the external point of view. For the doctrine of proper child liberty in matters educational has a much firmer basis than a mistaken doctrine of development. While a purely “following” education is impossible, it should not be hastily concluded that education consists even largely in repression. An appraisal of Froebel’s psychology is not the place for a lengthy presentation of an opposed point of view, but a short sketch may not be out of place. If we recall the illustrations given above of the child’s learning to say *mama*, and learning to leave off his anger, we see three essential elements in this learning process: (1) the varied character of the child’s responses to a situation, (2) the

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selecting effect of the social environment, and (3) the psychology of habit formation by which the child grows to the use or disuse of a particular response. Each of these elements either calls for or allows a certain amount of freedom to the child. As to the first, a varied response to any environment is, as a rule, the key to progress whether of the individual or of the group. Observation makes clear that, other things being equal, the *régime* of personal freedom, of individual responsibility, is the one in which there is most fertility of response. With reference to the second, if the social environment is to make wise selection, it will utilize to the maximum of feasibility the natural responses. This means, on the one hand, that the institutional life (social demand) should be in reality the means to the maximum expression of human nature; and on the other, that the less redirection necessary with any natural impulse, the greater the utilization of its strength. The history of education shows within the past hundred or so years an ever greater utilization of the natural response; or what is the same

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thing, an ever increasing freedom of self-expression to the child. As to the third element, it is fairly evident that of all possible means of selecting from among the child's responses, that which take place as a by-product of normal life conditions has all the while been the principal agency in education, even though teachers and parents have not generally so understood it. This suggests that we now send to the scrap heap so much of our educational machinery as prevents us from using to the fullest possible this natural selective agency of normal life. To put this more plainly, we have too many rigid desks, too many mechanical promotion schemes, too much conventional knowledge in the curriculum. We have relied overmuch on "do this" and "don't do that." We need to give our children more opportunity to live free, healthy, happy, normal lives. The Froebelian kindergarten has had a worthy part in preparing the public mind for this conception. With a sounder and more consistent doctrine of freedom, the kindergartner can join to her efforts those of the elementary teachers, so that with a united

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front substantial progress can be made all along the line.

Froebel's doctrine of self-activity. — In closest connection with the preceding are self-activity and play. So close indeed is the connection that a few words will here suffice. Self-activity implies inner impulse towards outer action as the means of self-development. "Above all outside stimulation is the child's strong impulse towards the unfolding of his inner being . . . which manifests itself in his whole life activity" (3: 121*). Here the inner impulse seems initial; in other cases, the impulse waits for some awakening stimulus: "The mother's influence thus resembles that of the spring sun, which by warmth awakens the life (the impulse, the power, the self-activity and the self-determination) in each seed kernel" (5: 16). Elsewhere we are told that the activity of the child is "usually, indeed, excited from without, but yet actually and formally determined by the innermost workings of the soul" (5: 57). These statements may at first glance appear somewhat contradictory, but the situation as described —

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with no claim for a purposive element in native responses — is just what is accepted in current biological psychology. No organism will act unless stimulated, but there can be no stimulation in the absence of a prior arrangement within the organism to receive just that kind of stimulus. Further the organism's particular "set" or "attitude" (either temporary or permanent) is an element in the working of the stimulus. If the "set" be peculiarly favorable, a very slight amount of stimulation suffices. In one sense the activity starts from within, in another it starts from without.

More interesting to us in this doctrine of self-activity is Froebel's anticipation of a later doctrine of self-expression. Froebel identifies self-active endeavor with the absence of external compulsion (1:222). In criticizing a certain contemporaneous school practice, Froebel says, "Children till now were too little employed, or not judiciously — that is to say, not self-actively or freely enough" (*nicht selbst- und frei-thätig genug*) (4:161). This is clearly the same as saying that self-activity is the opposite of

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compulsion, and that we have self-activity when the child identifies the proposed line of conduct with his self and its demands. This aspect of the doctrine is exactly Professor Dewey's doctrine of interest and self-expression.

Play is said to be a form of "self-activity" (*freithätig*) (1:55), which, so far as it goes, is an excellent statement. Perhaps more significant are the words that play "at first is simply natural life" (1:54). This allows us to say that play is exactly the free activity advocated above in the discussion of child liberty in the schoolroom. And certainly few accounts of actual playing could be more attractive than that given by Froebel in the *Education of Man* (p. 105 ff.). If only he had not departed from the beauty of this early practice when he had devised the kindergarten! Let us for the moment leave Froebel, and examine more closely the concept of play in general.

The meaning of the term play. — Any student of the subject is struck by the varying meanings attached currently to the word play. Hardly elsewhere is there so great a tendency to slide

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from one meaning to another. Play is at times defined in terms of the mental attitude towards the activity, being contrasted with work, labor, and drudgery. When the satisfaction inherent in a specific activity suffices to keep that activity going, the experience is commonly called play. If, however, some external compulsion or consideration is necessary to the continuance of the activity, some one of the other terms is considered more appropriate. At other times, play is distinguished from work in that the latter brings a useful result which is desired possibly for its exchange value, while play leads to no such result. In typical cases either way of defining might suffice, but many troublesome border-line instances present themselves, particularly in dealing with the growth of children; for children progress from a stage where play is admittedly proper to a stage where work is supposed to rule. In order to deal with these transitional cases it becomes necessary to take a closer account of play.

A kitten "plays" with a spool. The satisfaction of the activity itself leads to the con-

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tinuance of the activity. So a young child will "play." The operation of playing with the spool is very simple. Its characteristic is repetition, the unit element being a very short simple act. Preyer's child, for example, took off a box top and put it back on 79 times in succession. The kitten has no other kind of play; the child will grow to use more complex activities. Instead of the indefinite repetition of a very simple act, each repetend in the case of the child will become with increasing age more and more complex until finally mere repetition will disappear, swallowed up in a single elaborate process. The conscious use of tools, as scissors, paste, etc., enters; planning and devising are involved. The "end" of the process may be days, even weeks ahead. With the adult, the interval may be one of years, even decades. The simple act, many times repeated for its own sake, is clearly play. So also is the more elaborate act, if only the activity spring from the child's (or the man's) own interest, if he is completely identified in interest with the process as a whole and with each part of the process.

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Such a complex act need not be simply play, it may also be work. It will be work, if there be in it a serious utilization of one's available inner resources. If the activity be engaged in simply for the exchange value of the product and not at all for the satisfaction therein involved, then the activity is work alone, and not play. Labor, rather than work, then becomes the suitable term. If labor be arduous and fatiguing, it is called toil. If it be very disagreeable, performed only under constraint of some quite extraneous need, it has become drudgery.¹

When we turn from the general discussion to Froebel an adequate consideration is not easy. That Froebel valued play is undoubted. It occupied a large place in his pre-kindergarten thinking, as we have already stated. "The games directly influence and educate the boy for life, awaken and cultivate many civil and moral virtues" (1: 114). There are not lacking intimations that Froebel saw the transforming effect of the play attitude upon work.

¹ The definitions here given of labor, toil, and drudgery are taken from Dewey's *Interest and Effort in Education*, p. 78.

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“ If activity brought joy to the child, work now gives delight to the boy ” (1 : 102). “ The time has now come to exalt all work into free activity. . . . At the present time art alone can truly be called free activity ” (8 : 238). The proper education “ restores to work its high significance ” (5 : 40). In the kindergarten, we find an institution, for the first time, based on play. The world undoubtedly owes much of its present sense of the educative value of play to the kindergarten as an actual living institution. Jean Paul Richter preceded Froebel in this field, and even surpassed him in the statement of his theory,¹ but Froebel's institution has been the efficient cause in spreading the idea. It must be confessed, however, that Froebel's kindergarten play is too often — even too generally — the means of presenting in symbolic form to early childhood certain quasi-metaphysical ideas. “ I am convinced,” says Froebel, “ that the exalted and often ecstatic delight of children in their simple movement plays is

¹ Richter, *Levana* (Bohn Library), pp. 177 ff. Froebel read and admired Richter (see 9 : 38).

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by no means to be explained through the exertion of mere physical force — mere bodily activity. The true source of their joy is the dim premonition which stirs their sensitive hearts that in their play there is hidden a deep significance; that it is, in fact, the husk within which is concealed the kernel of living spiritual truth ” (4: 260 f.). In immediate connection he asks, “ May not their delight in these encircling movements, for example, spring from the longing and effort to get an all-round or all-sided grasp of an object? ” (4: 260.) How the gifts utilize symbolism in their derivation, and expect symbolism in their use will be discussed in the next chapter. There we shall have cause to regret that Froebel so largely used kindergarten play as a quasi sugar-coating process; but in spite of these faults no one can deny the great influence of Froebel in bringing about the ever increasing appreciation of all kinds of play.

Minor psychological doctrines. — To take up in detail the many respects in which Froebel's naïve psychology enters into his education would but weary the reader to no great purpose.

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He adopted, for example, the Pestalozzian fallacy that a logical simple is *ipso facto* a psychological simple. If the cube appears to the child "as too large a whole, and composed of too many kinds of parts, the child's view of it must be clarified by single perceptions" (4 : 84 f.). The mother will first clasp the cube so as to show one face only ; then later two faces, etc., and finally all ; so that the child will come in time "to a complete comprehension of the cube." Froebel further holds, contrary to present opinion, that "the child appropriates the words more easily by frequent hearing than by frequent repetition, for hearing impresses the mind more than repetition" (5 : 102 f.). Again, Froebel accepts, naturally without question, the doctrine of general training. "I have discovered . . . that the powers of memory and imagination are considerably increased" by the kindergarten training, — and "that the power of perception and comprehension is sharpened" (5 : 137 f.).

An interesting idea is Froebel's notion of "normal forms." The cube is "the normal

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form of a great part of all that is solid and occupies space" (4:86). "It is highly important for the human being that early in life, and even as a child, something normal be given to him . . . in order that he may recognize a generality and a unity for all that is particular and individual" (4:96). Thus when the child has become familiar with the cube, his attention is called to other rectangular bodies, as the book and the box, and their lines, surfaces, points, etc., "so all that the cube united in itself can be perceived separately in different objects surrounding the child" (4:98). Of many comments that might be made, two will suffice. First, there seems no sufficient reason to demand that the child be on the lookout for lines, surfaces, rectangular solids, etc. Some kindergartners have carried this to an unwarranted extreme. Second, the "generality and unity" here referred to had better come under more usual conditions, as generalizations from actual life situations. The child has no trouble in getting the concept "round" from actual situations of roundness. No "normal form" need give

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even the most conscientious kindergartner a serious thought.

A much more valuable practice on Froebel's part is the naming of anything with which he wished the child to become familiar. "All perceptions should be connected with words, that thereby they may be more clearly defined in thought" (4:207). This is sound psychology. The only criticism is that Froebel expects too much of it. He is even willing to use it when the child is so young that the words are "as yet incomprehensible." Even then, says Froebel, the "impression on the child" is not without "abiding results" (4:82). Here, as frequently, was Froebel using an otherwise good practice to get before the child ideas far in advance of his childish need. No mother need trouble that her baby get concepts of space, time, the "self-contained," or "the in-itself-reposing."¹ Her singing should be put to better use.

¹ Froebel would have the mother show her baby during "the second half of the first year" that a sphere in all its positions remains the same:

"I turn and wind and as I go,
The sphere in form I always show" (4:74).

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Summary of the chapter. — We thus finish our examination of Froebel's educational psychology. His doctrine of cultural recapitulation has a modern ring, but is now considered to have little or no value to us. The doctrine of slumbering germs of innate ideas we decline to consider seriously, although we thereby reject a chief foundation stone of Froebel's educational theory. The extended consideration of symbolism disclosed (1) the assumed existence of idea germs in the sense rejected above; and (2) a belief that the symbol has efficiency as such in advance of any experience of the thing symbolized. This was upon examination disallowed, and the whole of Froebel's peculiar doctrine of symbolism fell to the ground. Of considerable value was Froebel's doctrine of educational liberty, although its assumed basis in the doctrine of development was rejected. This led to a restatement of the meaning of development and a consequent restatement of educational liberty. Froebel's doctrines of self-activity and play were found to be valuable anticipations of the best current thought. Froebel

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was credited with being the principal single influence in bringing the modern appreciation of the educational value of play. Several minor items closed the chapter, chief of which was Froebel's doctrine of "normal forms." This seemed to contravene current conceptions of the nature and function of general ideas. On the whole, Froebel's psychology is strong in proportion as it comes from his sympathetic regard for the child, and weak in proportion as it originates in his general philosophical system. His feelings are truer than his theory.

CHAPTER IV

THE KINDERGARTEN GIFTS AND OCCUPATIONS

THE core of the kindergarten curriculum as devised by Froebel is the gift series. In Froebel's own words, "A course of training and occupations for children, answering to the laws of development and the laws of life, demanded a thoroughly expressive medium in the shape of materials for these occupations and games for the child; therefore to meet this want, I arranged a series of play materials under the title of 'A complete series of gifts for play' " (6 : 250).

Our first inquiry will be as to how this "series of gifts" is derived from these "laws of development" and the "laws of life." That there is one definite order of individual development was to Froebel clear: "There is a certain course and sequence in the development of all things, which the Creator has followed in building up the race, and which the human being

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must be allowed to follow" (9: 172). Whether the derivation of the gift series is based upon logical, or psychological, or social considerations need not be considered. To Froebel there is one "certain course and sequence in the development of all things." The series might be derived from any one or all three of these considerations, the result would be the same. "In the choice of these . . . first playthings . . . we have on the one side quite strictly followed the requirement of the thought, of the idea, and, on the other hand, the free life of the child and the requirements of that life, and so have come to one and the same result" (5: 204 f.).

In another place Froebel says that the kindergarten principles are not "arbitrarily decreed, but such as must arise by logical necessity (*Notwendigkeit*) from the child's mental and bodily nature, regarding him as a member of the great human family" (6: 251). Here all three considerations are present, but the words "must arise by logical necessity" are suggestive.

The ball as the first of the gift series. — At

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the head of the gift series stands the ball or sphere. "The ball is just as absolutely given as the first plaything for the . . . developing child . . . as the spherical form of the world is to the satisfactory insight into the system of the world " (5 : 187 f.). The reasons assigned by Froebel for this priority of the ball are so many and so varied that for convenience, we group them under seven heads: (1) The ball has symbolic value, (2) it has value as the "counterpart" of the child, (3) it has geometrical value as "the germ of all other forms," (4) it trains the mind, (5) it trains the body, (6) it socializes the child, (7) the child likes it.

Among these the symbolic value is the essential one, the others largely follow either as instances of or as corollaries from the symbolic. The ball symbolizes chiefly the three related concepts of unity, an inclusive whole, and the All. "What symbol does my ball offer to the child? That of unity" (8 : 211). "The child . . . perceives in the ball the general expression of each object . . . as a self-dependent whole and unity " (4 : 32). " Even the word ball, in our significant

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language, is full of expression and meaning, pointing out that the ball is, as it were, an image of the All (*der B-all ist ein Bild des All*) ” (4 : 32). The general theory of Froebelian symbolism, already presented, will explain why Froebel chose a symbol of the all-inclusive Whole and Unity as the first element of his series. The argument in Froebel’s mind runs substantially as follows. Education is essentially the unfolding of the child germ. To this end the child must play with the symbol or symbols of the mental content implicit in the germ. The end of education is the full knowledge of the all-inclusive Unity, God. This knowledge must in implicit form be present at birth in the mind germ. The child must accordingly begin his education with a symbol of this all-inclusive Unity, and must continue his development by using other symbols which themselves develop from the first symbol. The ball furnishes the initial symbol of the all-inclusive Unity, and is at the same time the germ from which the other gifts are derived. Further, as the child’s mind moves in its normal growth from

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an undifferentiated (unconscious) unity to a differentiated unity, so must the parallel series of symbols move from undifferentiated unity through differentiation and integration to a differentiated unity. The entire gift-occupation series accordingly consists of (1) the homogeneous sphere as the symbol of an undifferentiated unity, (2) the cube, brick, surface, and point (to name the typical steps only), which are implicit in the sphere and are derived therefrom by analysis, (3) the "occupations" (typical only), as pricking (making points), sewing (connecting points into lines), weaving (forming surfaces out of lines), peas work (constructing hollow solids by sticks stuck into peas or cork), which thus represent the integration of the general elements reached previously by analysis, and (4) finally an (approximate) sphere constructed, *e.g.* by peas work.¹ The gift-occu-

¹ The arguments here ascribed to Froebel are so scattered throughout his published works that the reader's patience would not suffice for the necessary examination were they adequately assembled. The interpretation may be accepted, however, without hesitation as true to Froebel; since the most widely divergent interpreters of Froebel, while differing *to toto cælo* as to the worth of the symbolic series, agree substantially that this is Froebel's idea. It should be added that professed followers of

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pation series is thus essentially symbolic, as a whole and in its parts; and inherent in its symbolism is the specific symbolism of the ball. Whatever pedagogic value may be allowed to the series, clearly the ball is, for Froebel's purpose, "absolutely given as the first plaything of the . . . developing child." The examination into the validity of the symbolism is postponed for the time until we have considered the other reasons assigned by Froebel for choosing the ball as the first play gift.

The ball is valued as the "counterpart" of the child in accordance with the so-called law of opposites, which demands that the child "cultivate and fashion himself" by means of an object "which is his opposite and yet resembles him" (4:32). After our discussion and rejection of this "law" of opposites, we have no hesitation in dismissing this plea for the ball as without merit. As for the ball's being the germ of other forms, our contemporary geometers will be surprised to hear any

Froebel differ widely as to their actual use of the occupation series with the children. Many, for example, hardly use peas work at all, although Froebel himself has a good deal to say about it.

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such opinion. It will be news to them that the sphere is "the primitive form, the unity from which all earthly and natural forms and structures are derived" (1:168), or that it is "the germ . . . of all other forms, which can therefore logically be developed from it in conformity with fixed simple laws" (4:33). While the sphere is in fact as much contained in the cube as the cube is in the sphere, and while geometry knows nothing of the sphere as "the primitive form," we readily see why Froebel should hold to such a position. His symbolism demanded that the sphere begin and end his series; the cube and other forms were needed from other and less symbolic considerations. Under these circumstances, Froebel puts the latter into the sphere in order that he might later draw them out, and thus symbolize his favorite doctrine of development.

The statement that the ball "trains" the mind needs more consideration. We have already discussed the idea of "normal forms." In this the ball is "the particular image of all individual (spherical) things" (4:33). The

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psychology of "normal forms" did not appeal to us as sound. No child of ordinary intelligence needs special training with the ball in order to perceive the roundness of an apple. His incidental experience with apples will suffice. Nor can we grant any special virtue to the ball as a means of "nourishing" either the child's attention or his "free independent action" (4:35). A rubber doll or any other attractive plaything would serve just as well. More interesting, if not more valid, is the claim that the ball gives certain important "perceptions of object, space, and time," "of being, having, and becoming" (4:37), "of present, past, and future" (4:38). The worth of these notions to the thought world need not be disputed. If the ball had unique value in bringing them, we should probably grant it a unique place in the curriculum. But in point of fact, so far as the ball can serve to give these notions, they will come as by-products of ordinary childish play, that is, incidentally without special consideration from any one and without special apparatus. Among these concepts those of

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space and time are especially interesting. It is a capital fallacy, apparently characteristic of the school to which Froebel belonged, to suppose that because the objects of the material world are known to the critical mind in space and time, therefore the concepts of space and time must precede a knowledge of things in order that the child's mind may have suitable pigeon-holes in which to place material objects as they become known. So worthless is static logic as a guide to genetic psychology! This same criticism we shall later apply to other aspects of the gift series.

That the ball affords opportunity for bodily exercise and for social activity cannot be doubted. But no peculiar value attaches to the ball in these regards. That the child likes to play with the ball is also true, but there is no sufficient reason to suppose the ball occupies any unique place in the young child's esteem.

We have now examined cursorily the principal reasons assigned by Froebel for making the ball the first of a gift series. The claims that the ball is the "counterpart" of the child or that it

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is the germ of the other geometrical forms, we dismiss as too baseless for serious consideration. That the ball affords certain training for mind and body, and that it is an attractive plaything for the child, we admit, but not in any peculiar sense or degree. In none of these claims, apart from the symbolic, yet to be examined, is there found sufficient reason — even in slight degree — for giving the ball a unique place in child development. Nor do these even tend to support a plea that might be urged from other considerations. If reason there be in Froebel's writings for placing the ball uniquely first in a gift series, that reason must be found solely in symbolic considerations, and nowhere else.

The symbolism of the ball. — The question then is on the validity of the symbolism of the ball. This has meantime become the key to the larger question of the validity of the gift series as Froebel devised it. Our original discussion of symbolism would suffice here. We should be entirely warranted in dismissing the series without further ado, by reason of its basis in Froebelian symbolism; but it may not be

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out of place to make the specific application to the question at issue. In the symbolism of the ball four propositions are implied : (1) the child's mind is a germ, as yet unconscious, but "destined" to unfold into full consciousness ; (2) the unfolding of the germ is mediated by material symbols of its implicit content ; (3) the implicit content of the child mind includes the destined conscious knowledge of an all-inclusive unity ; (4) the ball and its included forms constitute suitable symbols of this implicit content. Let us take these propositions in the reverse order. Is the ball a symbol of all-inclusive unity? If one so sees it, yes. If one does not so see it, no. The ball as such has no inherent symbolism. Few, if any, accept this symbolism except as part of a dogmatic system. The writer has found no others. Those who accept it do not explain how a homogeneous sphere can symbolize any especially laudable kind of unity. Numerical unity a ball shares with anything else that can be counted ; but there is no unique claim here. As for organic unity, or social unity, or an "all-inclusive unity," what has a homogeneous

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sphere to do with these? So far as the writer can see, the fourth proposition fails: the ball is not the symbol of the desired inclusive unity, not even of an undifferentiated unity.

What about the third proposition? Is the normal human being destined by innate endowment to a conscious knowledge of an all-inclusive unity? Whether there even be such a unity is a question of current philosophic discussion, with wide difference of opinion; but, philosophic dispute aside, as a matter of practical affairs, we need not hesitate to say that the fewest number of even the best educated people ever give a thought to such a notion of unity. Outside of kindergarten arguments, the term (in this sense) is never mentioned in practical education. To base a curriculum on a concept which belongs to a sect of metaphysicians, which practical people care little or nothing about, would seem far from necessary. The third proposition is at best doubtful.

The first and second propositions need not occupy our attention. This ground was fully covered in our special discussion of symbolism. The

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child's mind is no such germ as Froebel's symbolism calls for; the law of mental growth is altogether different. Further, no symbolism as such can appeal to or influence a child before experience with the thing symbolized; and where is the partisan bold enough to claim that the ball can appeal to the child — consciously or unconsciously — as a symbol of unity! What then is the conclusion? A strong negative. The concept of an inclusive unity is one that most of us care little or nothing about. If we did, the ball does not symbolize it. If the ball did symbolize it for the adult, it would not for the child. And the child's mind is no such germ as symbolism demands. The symbolic value of the ball may thus be dismissed as utterly without foundation.

The derivation of the series. — Before taking up the gifts *seriatim* we may note one or two significant statements. "This whole of plays and employments, being founded on fact, actually develops in the purest logical sequence, and necessarily from the sphere and ball" (5:123). "Each successive gift in the series . . . must be indicated in and demanded by the

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gifts already considered. We need therefore only to discover their process of development in order to discover what must be the character of their next successor" (4:203). These quotations lead us to expect a derivation of the gift series, based not immediately on child psychology, but on an assumed parallel, namely, the a priori demand of certain (quasi) logical laws. What then are the laws governing the unfolding of the gift series considered in and of itself? The answer to this inquiry will be found in the discussion of the successive gifts as presented by Froebel.¹

"What is now to be the indispensably necessary advance to the next plaything," the cube?

"These are the opposite properties which the next solid used for play must show":

"The sphere has one surface, . . . a curved one. The contrast must have straight surfaces and several of them. The sphere has no corners and no edges; the contrast must have corners and edges."

¹ It will be evident to those familiar with Froebel's gifts that I am not following all the intricacies of the series, but rather the most important steps.

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“ Now for similarity : the sphere has three similar directions or axes, reciprocally intersecting each other at right angles. . . . The next solid used for play must necessarily have these like properties together with the above-named oppositions. But this can only be the cube . . . , therefore the cube is with indispensable necessity the third¹ developing, educating playmate of the child ” (5 : 194 f.).

Two motives appear in this derivation of the cube from the sphere, first, to illustrate or utilize the “ law ” of opposites ; second, to lead to certain mathematical concepts. Lest any think that the “ law ” of opposites is here used simply that the adult may understand the derivation of the gift, and not at all for the child, I hasten to quote Froebel’s words in connection. “ It is important that this law be now brought to childish simple notice and perception in a child-like way even at an early stage of the child’s development. The necessity of this requirement and of quiet obedience to this requirement

¹ The first of these consists of six colored wool balls ; and the second is the solid wooden sphere. Froebel’s numbering, however, is not always consistent.

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very soon reveals itself. . . . The child's first pure incitement to comprehend and carry out all that is great and good in life is his pleasure in so doing " (5:196). In other words the contrasts between sphere and cube not only serve their direct purpose of bringing to the child's consciousness the contrasted geometrical properties, but at the same time they act, as do all (Froebelian) symbols, in awaking into activity certain implicit but dormant soul powers, here the law of opposites itself, which is, in Froebel's conception, the conscious basis of "all that is good and great in life." When the reader learns that such things "will give pleasure even to the child who is scarcely half a year, or at least not a whole year old" (4:78), he is better prepared to believe that Froebel had in mind the indirect (shall we call it occult?) effect of symbolism rather than the direct psychological influence which the scientific observer can witness.

The second motive, that of giving or awaking certain mathematical concepts, as "form, size, and number," we can best discuss in connection with the effect of the gift in leading the child

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“in a childlike manner into the fundamental ideas of physics and mechanics” (5:199). Which of these “fundamental ideas” Froebel had in mind can be gathered from the following rhymes (4:78 ff.), which are meant to be sung to the child when he is “not a whole year old” (4:78):

“Cube presses down your hand, my dear;

Press *it*, or it will fall, I fear.”

(Pressure of opposed gravity.)

“Cube to the ground will quickly fall

If by the hand not held at all.” (Falling through gravity.)

“The sphere takes up the space, you see,

So where *it* is cube cannot be.” (Concept of space.)

Of all these, we repeat the remark made above: If these conceptions are given early to the child, because of their supposed logical priority in an explanation of the material universe, we must seriously object. The order of learning is not the order of logical arrangement. General conceptions never precede. The notions selected by Froebel for the young child are so universally of this general and anticipatory character that we feel compelled to judge him guilty of this fallacy in its worst form. Let the reader note

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the following typical instance of what Froebel expects from play with the sphere and cube: "It is important for him that he himself in play, even as a child, by play should perceive within and without how *from* UNITY *proceed* MANIFOLDNESS, *plurality*, and *totality*, and how *plurality* and MANIFOLDNESS *finally* are found again in and resolve themselves into UNITY, and should find this out in his life" (4:98). The italics and capitals here are Froebel's. Could anything violate child psychology more thoroughly?

Our next object of study is the divided cube. Froebel names three principles of development which must characterize the derivation of the gift series. *First*, "each new gift fulfills and interprets its predecessor by making explicit what it implied." *Second*, "each object shall appear to the child as a self-included whole, and at the same time . . . as a part of a greater whole." *Third*, "all knowledge and comprehension of life are connected with making the internal external, and the external internal" (4:174). The third characteristic is especially illustrated

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in the divided cube. "The child between the ages of one and three years," after he has handled an object, "now tries to pull it apart." If he succeeds, "he then tries to put the parts together to form the whole which he at first had. . . . Thus after comprehending the *outside* of the object, the child likes also to investigate its *inside*: after a perception of the *whole*, to see it separated into its *parts*" (4:117 f.). We are thus led to a division of the original solid cube into eight equal cubes. With this the child "can make the *inner outer* and *outer inner*," an "important perceptible fact" (4:119). Froebel thus states the function of the divided cube: "By the use of this gift are recognized, comprehended, and represented, gradually and increasingly, the *general* in the *particular* (for example, in the center of each particular surface, the center of every square surface); *the most general* in the *most particular* (for example, in a *particular corner point* of the cube, the point in and of itself); *unity* in the *individual* (for example, in that particular cube, the properties and nature of bodies which occupy space);

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the *simple* and *unital* in the *various* and *manifold* " . . . (4 : 120 f.). That eight small cubes furnish good play for the child is undoubted; but how could anybody, even Froebel, expect a child under three, or of any age for that matter, to "comprehend" in any degree or fashion the "general in the particular" or "unity in the individual"? And could anything be worse than the geometrical instances here given? Is it too much to say that Froebel totally misconceives the genesis and function of general ideas?

There is no need to discuss the remaining gifts in detail. The next (fourth) consists of the original cube divided into eight equal brick-shaped blocks. The fifth gift consists of the original cube divided into twenty-seven small cubes, three of which are divided diagonally into halves, and three diagonally into quarters, the rest undivided. Consideration for the reader forbids my quoting at length the delightful mathematical derivation of this fifth gift. As a sample of its tone I present about one tenth of the whole:

"Vertical and horizontal lines are both straight

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lines. They are also in their directions contrasting lines. Contrasts in accordance with the universal law of development imply mediation. The diagonal mediates the contrasting right lines and hence is demanded by them" (4:203).

This completes our consideration of the derivation of the gift series. The reader has seen enough to convince him that Froebel in devising this series was influenced principally by symbolic considerations, secondarily by a desire to develop in the child certain mathematical, physical, and logical concepts of a most general character. These, it was expected, would give the child a comprehension of the world of nature. We need not repeat our discussions of the value of these. That the symbolic as here found is wholly worthless, and that the general conceptions are for the tender years almost equally so, will be readily granted. Before making a final valuation, however, we will consider the manner in which the gifts should be used; for this must enter into our judgment.

Directions for using the blocks. — When the child begins his play with one of these divided

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cubes, the gift is handed to him in an individual box. He is to turn the box on its top, "draw out the cover and raise the box with a steady hand," thus leaving the whole cube with its parts well arranged standing before him. This will bring the child "much inner profit." *First*, "it is well for him to receive his playthings in an orderly manner." *Second*, "it is good for the child to begin his play with the perception of a whole, a simple self-contained unit, and from this unity to develop his representations" (4:205). The first of these suggestions makes for neatness and order, though one would not care to insist upon any far-reaching transfer. The second is again symbolic. Froebel has an obsession for "a self-contained unit." We dismiss this instance along with the rest of his symbolism.

In each construction with the materials of any one gift there is for Froebel "one permanent and indispensable condition" (4:219), namely, that "the whole of the materials must be used up; or at least each separate piece must be arranged so as to stand in some actual

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relation to the whole. While this awakens the thinking spirit, it also strengthens and elevates the imagination; because, amidst so much variety, the underlying unity is made visibly apparent, and the invisible law is felt " (6 : 72). Again the symbolic interest in unity. This time in rather a vicious form, because it tends to distract attention from the inherent unity of the child's plan in favor of an artificial and external unity of the material. In the same way, the thinking by which a child fits in a left-over block relates to an artificial problem set for him from the outside. Both aspects of Froebel's aim in this rule are in direct opposition to his really vital principle of self-activity. Each new instance makes clearer the fact that Froebel's symbolism is essentially destructive of natural healthy childhood.

The doctrine of sequence. — In the use of the gifts there is yet another rule, that of "sequence," which regulates the succession of forms constructed from the blocks. Of such forms Froebel holds that, "it is above all important that they be developed one from another. Each

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form in the series should be a modification or transformation of its predecessor. No form should be entirely destroyed. It is also essential that the series should be developed so that each step should show either an evolution into greater manifoldness or variety, or a return to a greater simplicity " (4:224 f.). It is important to Froebel that the child see " how one object springs from another, and can be turned into another; for example, a table into a table and two benches; these into four benches, etc." (4:180). In Froebel's opinion " the anticipation of a certain necessary inner coherence in the thing, whether it be in its form or in its purpose — this manifold perception of a certain inner life throughout — not only awakens, but fosters and forms the life of the child. Isolation and exclusion destroy life; union and participation create life " (4:180). Once again does Froebel's practice defeat his purpose. Where is the " necessary inner coherence " when a table and two benches " spring from " a table? The purpose of " sequence " is, of course, to symbolize development; but unfortunately for Froe-

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bel, it illustrates a false development; benches do not evolve from tables. Fortunately for the child, on his part, the symbolism is all wasted. This "sequence" has no worse effect on him than any other sort of clog. The child's natural play is merely hampered; that is all.

If it be urged with Bormann that the child in this sequence is learning "care and patience, and a respect for the existing state of things . . . rather to build up the new from the old in an orderly way, than to hope for new things out of the ruins of the old" (9:210), we note that this was said during the sharp reaction in Prussia following the attempted revolution of 1848. Even Bormann's favorable report could not prevent the prohibition of the kindergarten throughout Prussia. The words of this report are meant to quiet a startled conservatism, to set at ease intrenched privilege fearful of change, which indeed wishes "patience and a respect for the existing state of things." Froebel himself, the Froebel of 1826, was more democratic. But "the respect for the existing state of things"

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as seen in the child's building is symbolic only. Its only effect is to prescribe external limitations. We do wish the child to learn "patience," but not the patience of submission. We do wish him to utilize the old, *i.e.* the available, but for reasons of prudential husbanding of resources, not because it is old. If this sequential building had any effect on the child save handicapping his natural endeavor, if the symbolism did work, its legitimate result would be to develop a blind respect for whatever is, — an unreasoning conservation of the old. This we do not desire. Again, the effect of "sequence" is bad.

A third aspect of "sequence" is seen in the exemplification of another favorite "law" of Froebel's. In making the "beauty forms" with the blocks of the fourth gift (brick-shaped) two forms appear, the "radiate" and the "circular." "These forms are counterparts. The appearance of forms which are at once antithetic and related calls for mediation or transition. . . . Hence the radiate form must be connected by intermediate forms with the circu-

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lar. . . . These transitional forms demand a fresh mediation " (4:187). Some not well acquainted with Froebel's writings may inquire whether the writer has not unfairly selected for comment mere chance excrescences of Froebel's kindergarten system. That such is not the case will appear from Froebel's explicit statement regarding this particular sequence, that " in the visible connection of the pure antitheses lies the formative and instructive influence of this (the fourth) gift for the child " (4:190). Some of us watching children at play with their blocks may have thought that the value to them lay nearer at hand; but Froebel's opinion is far otherwise. In this " visible connection of the pure antitheses . . . the child early anticipates, perceives, and recognizes how intimately the finite and infinite, necessity and freedom, law and free will, are connected with another." The reader is asked to note the words, " early . . . perceives and recognizes, . . . the finite and infinite. . . ." Could symbolism claim more? As if in very denial of any unfair emphasis upon symbolism and the law of opposites, Froebel continues:

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"The illustration of this universal law by means of perceptible phenomena is, in our judgment, as important for the heart and soul culture of the child as . . . the inhalation of air from the atmosphere" (4: 190). The simple truth is that Froebel's conscious formulation of the kindergarten and of its practice are based in the larger part upon these two mistaken principles of "opposites" and symbolism; and it is high time that the entire kindergarten world should recognize this fact.¹

"Forms of life." — A more defensible use of the gifts is seen in the so-called "forms of life," considered apart from the practice of "sequence." These "forms of life" involve a symbolism which we must distinguish sharply from the symbolism designed to wake innate ideas. In our discussion in Chapter III (page 73) we referred to the symbolism of childish imaginative play, in which the object, or symbol, permits on

¹ It is not too much to say that the fundamental difference between "conservatives" and "progressives" in the kindergarten ranks is exactly upon the acceptance or rejection of these two doctrines. Those who reject feel the consequent necessity for a thoroughgoing remaking of the kindergarten program and procedure.

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the child plane an activity normally belonging to adult life. A mud pie, for instance, allows the child to be first cook and then hostess, in imitation of what she has seen in adult life. Here the child reproduces, acts out, "tries on" what she has observed in the home. In so doing an element of make-believe enters. Is coffee desired, clear water can take its place. The coffee pot may even be entirely empty; but if only the pouring be simulated, hostess and guest will drink with all seriousness from empty cups. This imaginative element seems a beneficent counterpart of childish helplessness, for it disappears with advancing years through the various stages of empty cup, pure water, coffee-colored water, some actual drink prepared by the child, and finally coffee prepared by the cook. As the counterpart of childish inability to procure the actual objects of adult life, this power to make-believe more than supplies the deficiency. Not only is the imitated activity thereby allowed to proceed in all its imagined fullness, but the very act of imagining supplies additional zest. The psychologist, how-

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ever, sees that the act of imagining is most pleasurable only when it is naturally subordinate as means to the portrayal of mimic life initiated self-actively by the child itself. When Froebel uses the child's fondness for the imaginative as motive to secure the manipulation of concept giving blocks, apart from child initiated play, then the child's imagination has been turned aside from its true function; and sentimentality is the result. In one paragraph (4: 98 f.) Froebel mentions twenty things that the cube can represent to the child, and even then not content adds "innumerable other things." He explains that "the child will be early led through this representation to perceive and comprehend *one* thing under *many* points of view" ¹ (4: 99). Clearly here Froebel is concerned not that the child express himself through play, but that the cube may teach the logical concept of "the one and the many." If the child in the course of his own self-initiated play wishes to use a block for now one thing and now another, even up to twenty times, good only and not harm has

¹ The italics as elsewhere are Froebel's.

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resulted. But if the kindergartner, in her determination that the child attain some external end that she has set, have him imagine that a cube is, in order, a table, a stool, a chair, a hearth, a chest, a bureau, a house, etc., etc., then is the natural function of imagination so perverted that the child becomes *blasé*, a result that the kindergarten critics have more than once pointed out. The use of the blocks and other elements in the gift series to represent "forms of life" is one of the most fruitful of Froebel's contributions; but the pleasure inherent in this must not be used as sugar coating for "nasty" metaphysical pills. Fortunately, a better soul physic has seen that the metaphysical pills are not good, or at best useless, for children, so that we may now prescribe real play from real child motives, resting assured that out of such will come the best results.

"Forms of knowledge." — We have several times referred to "forms of life" and "forms of beauty." "Forms of knowledge" complete the trio. These three terms refer to three diverse uses or purposes of the gifts. Life

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forms refer to those uses of the gifts or occupations which represent things of social life, as table, chair, bird, wagon, etc. Beauty forms are such arrangements of this material as are intended to appeal to the esthetic appreciation. These are usually made symmetrical with respect to a center. Knowledge forms are those arrangements which are designed to teach facts of arithmetic or geometry. In these three uses of the gift, the forms of life should be given first, then the forms of knowledge, and last the forms of beauty. "I consider it very important," says Froebel, "to retain this transition in general" (4:186), although elsewhere he possibly contradicts himself by apparently approving a transition "from use to beauty, and beauty to truth" (4:219). Enough has previously been given about "life forms" and "beauty forms"; but so far little has been said of "knowledge forms."

The use of knowledge forms begins with the "child from one to three years old" (4:138), and includes some fractional concepts that we of the present generally postpone to a later

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age. For instance, with the eight small cubes, the nurse sings :

“Look here and see! One whole, two halves;
One half, two fourths; two halves, four fourths;
One whole, four fourths;
Four fourths, eight eighths;
Eight eighths, one whole.
Here are many, here are few;
It's a magic way to do ” (4 : 139).

“ Now what is the aim of all this ? ” asks Froebel, and he answers that: “ It is . . . by no means intended . . . with the so-called forms of learning, that the child should already definitely comprehend relations of size and number, but that a certain tone be always connected with a certain perception, and the tone, when it is again heard, may recall a certain perception, and so anything indefinite or empty may never come near the child ” (4 : 141). Some of us would think that nothing more “ indefinite or empty ” than such songs as these could be brought before the child of from one to three years of age.¹

The knowledge forms “ adapted to children three and four years of age ” (4 : 185) are more

¹ Possibly under two years of age. See *Pedagogics of the Kindergarten*, p. 141.

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geometrical in character. The play is now with the fourth gift (eight brick-shaped blocks forming a cube). After many similar plays and songs, this is sung :

“Now I will give you something new,
Something you will like to do :
Twice as long and *half* as wide,
Half as long and *twice* as wide,
The same size are we two” (4 : 185).

Froebel in immediate connection says of such exercises that “ their contemplation and comprehension are perfectly suited to the life, mind, and spirit of children three and four years of age, and so wholly adapted to actual free play ” (4 : 185). It is unnecessary to say that the whole world of educators, Froebelians and non-Froebelians alike, are in opposition to the judgment here expressed. We may add that Froebel, never content to leave things on a matter-of-fact basis, says that “such exercises, moreover, give the child a presentiment of the inner harmony of nature and life ” (4 : 185 f.). How such may be true, this writer does not know.

When we come to the fifth gift, a cube com-

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posed of twenty-one small cubes, six half cubes, and twelve quarter cubes, the proposed knowledge forms become truly appalling. Although the child is to be allowed "entire freedom in developing from a given point of departure," we find Froebel saying: "Thus proceeding from the rectangular prism the child may, according to his own impulse, develop the rhomboidal prism to the trapezoidal prism. These forms lead on to the hexagonal and pentagonal prisms" (4:208). If this were simple manipulation, it would not be as bad as it sounds; but the child must know the forms he is building. His "representations must be lifted into the clearness and precision for which he longs (*sic*) and finally his productions must be clearly defined in words" (4:210). As might have been foreseen, Froebel sees development symbolized in this construction. "Here as everywhere the point of prime importance for its formative influence is the development of one form from another" (4:212).

Although the symbolic value is "here as everywhere the point of prime importance," the pure geometry involved is not to be over-

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looked. Thus, having made a trapezoid, the child is taught to sing :

“Blunt angles on the shorter side we see;
Sharp angles on the longer sides must be” (4 : 210).

Or again the child having built, under direction, a triangular right prism and next a quadrangular right prism of half the height and twice the base, he is taught to sing :

“Four corners you can bring to view,
While only three I show to you.
Twice as tall I am as you,
Just as long, and it is true
That, as we cover equal ground,
Our contents equal must be found” (4 : 218).

Enough has been given of the “forms of knowledge” to show that Froebel does not adequately adapt the selection of “knowledge” to the child plane. Granting that the normal child could be led, under skilled direction, through these exercises, two insuperable objections would still remain. Such exercises contradict the demand for spontaneous interest (“self-activity”), and they seek to convey information that cannot function vitally in the child life. To call such didactic activities by

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the name of play is to degrade the term. To find educational value in them one would be compelled to accept some unwarranted disciplinary theory. This, of course, is what Froebel did, both in his symbolism and in his doctrine of logical anticipation. Because all material objects have mathematical volume, therefore the child must antecedently learn of volume in order to comprehend the material world. From every point of view then we feel compelled to reject, in Froebel's direct intent, these "forms of knowledge" as unsuited to the early curriculum.

Significance of the gift series. — To prolong further our review of the gift series and its use would unduly weary even the most patient reader. We have seen that Froebel's purpose in devising the series was to secure the development of the child by means of suitably chosen occupations and games. Passing by the error of conceiving development as mere unfolding, we must see in Froebel's endeavor one of the most original and most valuable suggestions yet made for the education of the child. Never

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before had an elaborate régime of early education been devised independently of prescribed intellectual tasks. True, Jean Paul Richter had written of such, and Wilderspin had devised an institution in which the child had more joy and freedom than theretofore; but Jean Paul achieved neither device nor institution, and Wilderspin's effort was substantially but a sugar coating for formal learning. Froebel, on the contrary, intended to supply, largely from observation of actual child life, those activities in and through which the child might attain his destined growth and development. In furtherance of this, he first (before 1826) seized upon building and representation in general, as a valuable exercise for the child, believing that in play the child should, "at least mentally repeat the achievements of mankind, that they may not be to him empty, dead masses, that his judgment of them may not be external and spiritless" (1:282). For these building purposes Froebel (in common with Wilderspin) used blocks of various shapes, from one to twelve inches in length. The most

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numerous, "at least five hundred" in number, were brick shaped, $2 \times 1 \times \frac{1}{2}$ inches (1:283 f.). It is interesting to note that the fourth gift was years later to consist exactly of eight of these bricks. Subsequently, in 1836, Froebel tells us, "the ball, the sphere, and the cube, as the earliest toys of childhood were discovered and worked out, but still in the same remarkable retrograde fashion, from the cube proceeding to the sphere" (6:107). The order of genesis in his own mind seemed thus to have been (1) blocks one inch square, one to twelve inches long (1:283), (2) the brick-shaped blocks¹ (fourth gift), (3) the cube, (4) the sphere. It is worthy of comment how near this is to the reversed order of the final series. Even during the earlier period (before 1826) Froebel had stressed the intellectualistic. When the boy had built, he must describe in words exactly what he had done: "I have built a vertical wall with vertical ends, a door, and two windows at equal distances, etc." (1:284).

¹ It is possible that these first two stages were simultaneous, or even reversed.

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In bringing each step thus to clear consciousness Froebel was quite possibly influenced by his master, Pestalozzi. Some, Froebel says, were "inclined to doubt the utility of these exercises" (1:282). For himself he thought "this instruction [building, drawing, modeling, etc.] addresses itself equally to the senses and through them to the power of thought, and to external manual activity" (1:294).

It is instructive, though sad, to reconstruct the successive steps in Froebel's thinking. The intellectualistic end, implied here, explicit elsewhere in the *Education of Man*, came to dominate more and more. When he gave up teaching older boys for the study of infancy, he must, as he saw it, in some way compass it that the young child get the ideas logically prior to an explanation of the universe. To this end there must be selected and arranged a hierarchy of ideas; the most inclusive to be appropriated first by the child, and so on in descending order of importance.¹ Among these

¹ ". . . My general method of development and nurture . . . which descends from the universal to the particular" (4:237). See also 8:210 ff.

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ideas unity stood first as most important, because most inclusive. How shall the child get this hierarchy? For some of the ideas not too high in the scale, such as space and time, and geometric concepts, ordinary experience — Froebel thought — would suffice, if sufficiently repeated. For the more inclusive ideas higher up in the hierarchy, which clearly transcend child experience, the doctrine of innate ideas and symbolic awakening of these was seized upon. When this stage has been reached in Froebel's thinking, the simple wooden blocks would no longer suffice. Other gifts and occupations must be devised in accordance with the demands of symbolism, and the whole arranged to meet these demands, including particularly the illustration of the law of opposites. The purpose of the now complete series was thus to give to the child this hierarchy of ideas: unity, unity in diversity, plurality, mediation of opposites, the general and the particular, *Glied-ganzes*, space, time, being, becoming, sundry geometrical and numerical facts, etc. For this the reliance was, primarily, on symbolism —

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powerful enough to work in ways no mortal can understand — and, secondarily, on many times repeated experience which can cope with the less difficult ideas, though even here Froebel goes far beyond sober observation.

This then is the genesis of Froebel's later theory and practice, a sad degeneration from his own earlier and better thinking. Having accepted symbolism and believing that the mediation of opposites is in very truth the fundamental fact in the universe, he bases on these practically the whole procedure of his new institution, the kindergarten. How the kindergarten in spite of these fundamental errors has in it, nevertheless, some tremendously vital elements, — this is a question later to be discussed.

Summary of the chapter. — In the meantime we conclude of Froebel's gift and occupation series: (1) that its immediate purpose of giving to the child a hierarchy of all-inclusive ideas is an error based on a confusion of logic and psychology; (2) that the primary means of accomplishing this purpose, namely, by symbolism,

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is founded on a false and misleading psychology ; and (3) that the secondary means, namely, habituation to certain abstract ideas, is derived from a mistaken observation of child activity. From another point of view we further conclude (4) that there has as yet appeared no sufficient reason for seeking a specific and definite series of materials for the education of the young child ; (5) if such were demanded, the (quasi) logical method of devising it is in total violation of child psychology ; (6) Froebel's proposed series is unwarranted in theory and unjustified in practice ; (7) the further use of Froebel's series as such obstructs the scientific search for a better curriculum, handicaps the intelligent kindergartner, and violates the child's right to enjoy the best known tuition.

CHAPTER V

ADDITIONAL ELEMENTS OF THE KINDERGARTEN CURRICULUM

WHILE the gift series makes up the most definite part of Froebel's kindergarten curriculum, there are other elements which demand consideration. Among these none now stands out more strikingly than the use of games. What then was Froebel's purpose in regard to these?

Froebel's use of games. — The play of earlier childhood is by Froebel distinguished from the play of boyhood in that "activity as such" is the characteristic of the former, while the latter includes "a definite conscious purpose" (1:112). The latter is found chiefly in games, where the social element is the pronounced characteristic. The good results to flow from boys' games could hardly be better stated: "justice, moderation, self-control,

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truthfulness, loyalty, brotherly love, and yet also strict impartiality . . . courage, perseverance, resolution, prudence . . . forbearance, consideration, sympathy and encouragement ” (1 : 113*). At a later date, Froebel, discussing the games seen by him in Pestalozzi’s school, says that “ the higher symbolic meaning of games had not yet dawned upon me ” (2 : 82). Just when this “ symbolic meaning of games ” did come, we cannot say, but it proved with the advancing years an increasingly important factor in his discussion of the subject.

In the making of games for the kindergarten Froebel followed at least a partially inductive method of procedure. “ A large majority of our games I have obtained, just as they are, simply by watching children at play, then recasting their games in the spirit of my whole system ” (6 : 94*). The social value of such games is evident. “ Combined games for many children . . . train the child, eager by his very nature for companionship, in the habit of association with comrades ” (6 : 253), a statement evidently in thorough accord with the best

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current psychology. Most of our schools of all grades would do well to utilize this general conception in a far more thoroughgoing manner. While the flexibility of Froebel's daily program is in many respects open to question, in the matter of games he is explicit. What he presents are "just samples of what may be done . . . the true kindergartner will listen to the suggestion of the children and will be guided by circumstances" (9:177). It may be remembered by some that on one occasion, at least, the games divided the time equally with building (6:55).

The physical aspect of games likewise interested Froebel. In one place he speaks of "little games arranged to exercise the limbs and senses of the child" (6:252). Elsewhere he asserts that in his games are embodied "all the main exercises of gymnastics" (6:64); and in the *Pedagogics of the Kindergarten* (p. 272 f.) he gives a number of physical exercises in connection with the ball games. There are moreover a number of references to exercise in the "open air" (4:250), including running

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paces (4:265). Readers of Froebel will recall in this connection his opinion that "every town should have its common playground" (1:114); and how at another time he plans to train playground directors (6:162).

An examination of the movement games described by Froebel (4:237 ff.) discloses a number that are very attractive to children: "The child likes to walk" (played in a ring), "We all like to walk" (this may mean an actual visit in the neighborhood), "The snail" (in which a line of children winds itself into a spiral and then unwinds), "The wheel" (in which the children make up a turning wheel), and various other circling games. If these are well played with lively songs and apt rhythmic movements, they greatly delight the children. In the actual utilization of such games Froebel made a great and permanent contribution to early education. So far as I know he deserves entire credit for doing thoroughly pioneer work along this line. Others had written of it, still others had encouraged games as enjoyable recreation. Froebel first utilized them for their educative value.

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The school of the future will make even more thoroughgoing use of games and play.

The superior value of these games to some other of Froebel's kindergarten activities is due partly to the fact that in these his peculiar doctrines — while present in theory — have less effect on practice. The reader will recall that the games collected by Froebel were recast "in the spirit of his whole system." He speaks thus of the "inner spirit" of the games (6:82) and of their "inmost deepest meaning" (6:83). Knowing Froebel, we are not surprised to hear that he has "little songs . . . to lay bare the inner meaning of the game" (6:253 f.), nor to learn that "the comprehension of the games to be arrived at later on by the growing mind of the child is the main thing to aim at" (6:88). So insistent is Froebel on this meaning aspect that he goes so far as to assert that "we have here no childish or one-sided play, but games which represent true thoughts and ideas of adult and cultivated men" (6:86 f.). Even Froebel, lover of children as he was, could not get entirely away from the age-old conception

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that the child life is real only to the degree that it prepares for the (supposedly) real life of the adult.

The "inner meaning" of games.—To explain this "inner meaning of the games" which must be "laid bare," several points are brought out by Froebel. The child should be questioned as to what he has seen in his walking games that he may learn "not to pass by objects without observing them" (4:246), and "praise is awarded to most acute observation" (4:250). Whatever value attaches to this is at best incidental rather than inherent in the games as such; we may therefore pass it by. Certain open-air games have to do with flowers and plants. "The object of such games . . . is to draw the children to the observation of natural phenomena, and at the same time to sympathy with the pure, eternal, unresting, ever peaceful, helpful life of nature" (6:94). To what extent the second aim of nature study here expressed is desirable and feasible, individual interpreters of child life will differ. To wish this and to seek it is, however,

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thoroughly characteristic of the Froebelian position.

The "inner meaning" so dear to Froebel is as elsewhere in kindergarten practice most closely associated with the ball and circle. Strangely enough Froebel even insists that "the ball has furnished incitement and type" for the movement games described above, although the ball was in no wise used (4:269). In another kind of game where the ball is used, he says, "the movement of the ball seemed to affect the children magnetically" (4:269). Perhaps — some carping critic may add — the same thing is true in a modern football match. Again Froebel speaks of the "almost magic effects obtainable by ball games, especially with sickly rather stupid children." That he is describing what he has seen is pathetically evident: these "remain uninterested for a length of time together. At last you see pleasure rise, as if from a deep grave, and smiles spread over their faces, and their little arms seem to acquire life for the first time" (6:101). But we are by this time thoroughly accustomed

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to Froebel's extravagant claims in behalf of the ball. The symbolized conception of a whole and of unity is always dear to him. We referred above to "the snail" as an attractive play for the child. Froebel approves it as the closing game of a series, because "it unites all the children in one whole of living activity, and finally yields the form of the circle which is symbolic¹ of wholeness" (4:256).

But of all childish activity, circular action games have most significance. "The games in a circle hardly ever make the children tired. The reasons of this fact lie very deep, to my thinking." These reasons are thus set out:

"This kind of play is the symbol of a triple life. First it is the symbol of the individual life; . . . for all our actions tend, like those of the children in their games, to some one invisible fundamental . . . longing of the soul.

"Second, it is the symbol of the life of

¹ The word "symbolic" which Miss Jarvis here uses does not occur in the original, but is perhaps fairly to be inferred. A literal translation would be that the snail is "in every respect adapted" (*ganz geeignet*) to close a series of games, "because it unites all the playfellows into a lively and in the end completely formed whole, the circle" (14:346).

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nature, where, as . . . with the planets, all revolves about a midmost unity. . . .

“And thirdly, it is a symbol of the collective life of mankind in general, whose ultimate . . . union rests also on the invisible midmost unity of all life . . .” (6:61).

Does the reader in defense reply that these ideas concern the kindergartner only? Froebel answers, in immediate connection, “I hold it certain that a child yearns (*ahnet*) for such symbolized relations of life.” And he continues, “if, as opportunity offers, they are awakened, and raised up to become an inward and spiritual intuition, the child will be strengthened for that demand later to be made upon him, that he shall hold fast to the invisible unity of life amidst the ceaseless changing play of phenomena” (6:61).

Other concepts besides unity are involved in the circular movement games. A large circle of children is broken up into several small circles, and these are later recombined. “In this way,” says Froebel, “the particular, the individual, and the universal are shown in

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gradation and harmony" (4:280). To whom, do you ask, are these general ideas shown? Froebel adds: "Through experiences of this kind the child is prepared to recognize the relationship of particular and universal in nature and in life, and finally to realize the significance of these relationships in the structure of the universe" (4:280). Whether the reader can accept this statement or not, Froebel thoroughly believed it. The Festival on the Altenstein, arranged by Froebel in 1850, and described by him at length (7:24-66), was based exactly on such psychology. The motto of the occasion was a quotation from Schiller:

"Deep meaning often lies in childish play" (8:109).

First a large circle was formed of all the children, "all the faces were turned toward the middle of the circle, and thus each surveyed the whole. . . . In this way was to come to each participant the most efficient and highest perception of the life, . . . the outwardly invisible unity determining the whole, here the invisible center which yet determines the circle"

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(7:29 f.). Then eight concentric circles were formed. "This classification expressed that . . . the bearing in mind of one idea does not exclude the formation of subordinate wholes" (7:31). As the children sang "See us all in union here," the circle moved alternately to the right and to the left, to show that one idea can prevail in spite of that "which is opposite in outward appearance" (7:31). Each circle now broke and joined with the others in such way as to form a spiral, the leader stepping to the center. "The invisible middle had become visible in its attracting and uniting power"; and as they marched, "the whole developed again from the center, like the plant from the germ" (7:32). So far we have seen symbolized in this festival the all-inclusive directing unity, the member-whole relationship, the mediation of opposites, and the concept of development. To Froebel "it seems almost impossible that the aforesaid perceptions should have no effect on the life of the child" (7:37).

Vicarious symbolism. — As if considering

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possible objections to the symbolic use of games, Froebel admits that he does not "intend that such meanings should come to consciousness in the child in the extent" that the songs used would suggest. He then directs that "the loving kindergartner should retain the meaning as clearly as possible. This clear perception of the meaning of the play by the kindergartner acts on the child's mind as the clear sunshine and warm air act on the germs, buds, and blossoms in the spring, warming, developing, forming for the child, into thoughtfulness, intelligence, rationality, understanding of life and union" (7:41).

Much has been made of this vicarious symbolism by certain followers of Froebel. As a rule these realize the futility of expecting the symbolism to affect the child directly, yet are loath to give up a doctrine so essential to their system. They accordingly take refuge in Froebel's suggestion quoted above, and give the kindergarten novitiate an even more thorough grounding in symbolism in the hope that from her effluence the child may after all receive the

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desired beneficent results. If any one has heretofore thought that straight Froebelian symbolism was the limit of obscurantism, what will he say to this naïve psychology which thinks that symbolism merely held in the kindergartner's mind can bring to the child such results as Froebel promises? Leaving so impossible a doctrine to fall of its own weight, we turn from the effects on the child to the effect on the teacher. In the main our previous discussion of the baselessness of symbolism for the child holds here as well. The kindergarten novitiate can, it is true, appreciate symbolism in cases where the child cannot. Such instances, if worth while, belong largely to poetry, which does not use the Froebelian psychology. In those other cases where the young kindergartner can intellectually catch some glimmering of the Froebelian symbolism involved, the result is as worthless as can well be imagined. What waste of time could, for instance, be greater or more inane than that of having girls in the training school point out all the symbolism put by Froebel's direction into the

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original pictures of the Mother Play book? Yet this practice is to be found even now.

Still more serious is the obstacle that such a use of symbolism puts in the way of scientific psychology. If the kindergartner selects games from the point of view of symbolism and directs her pupils accordingly, she is directing by that which is essentially untrue to child psychology, and she must in consequence fail to make the best use of her time and efforts. It is like beating tom-toms to avert pestilence. Attention and faith being directed to the useless, not only is the immediate situation not met but progress in scientific method is the longer postponed. Symbolism administered to the teacher does less harm than when given directly to the child. Its immediate effects at any rate are less pernicious. But looking to the future, one would almost prefer that the symbolism were given directly to the children and with all its extravagances. Common sense would then recoil and banish it utterly, root and branch, from kindergarten education.

Mother plays and the Mother Play book. —

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It is but a step from games to the Mother Play. No other of Froebel's books has occasioned so much dispute. It is described by Froebel himself as a "book for mothers and families for the very first training of the child, that is, for mere babyhood" (6:250*). One group of kindergartners while tenacious of the Froebelian tradition has made small use of the Mother Play, apparently deeming that it properly belongs to the pre-kindergarten age. Another group has made it practically the core of the kindergarten procedure. Still a third has used it but little, holding that other better material is available. It is impossible not to feel some sympathy for those Froebelians who defend the book. It contains as adequate an account of Froebel's essential position as we have. The *Education of Man*, in many respects Froebel's masterpiece, was written before he had any special interest in very young children. The collections of articles found in the *Pedagogics of the Kindergarten* and *Education by Development* tend to be expository and dry, often descending to wearisome details. The

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Mutter und Kose Lieder by contrast concern the young child especially and are never mechanically expository. They represent the height of Froebel's interest in the child, pictured to us at the child's most attractive age — babyhood. There can be no doubt that Froebel presents here, as few elsewhere have done, the movement of maternal instinct. Said Froebel to the young mother, "these songs, games, and stories . . . are to help you get a firm hold over the earliest life of childhood, while your child is a baby in arms" (3:124*). The first verses in the book describe "a mother's feelings on seeing her first-born child." The first of the plays is the "Kicking Song."

"When happy Baby moves his arms and feet;
In mother stirs the love of play most sweet" (3:12).

The appeal of the book is thus first of all to one of the deepest emotions, especially deep in those who elect to be kindergartners. No wonder that rejection on merely rational grounds should provoke antagonism on the part of those who have not clearly differentiated the nature of the appeal. A second motive is

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the mystical; fewer feel this, but they feel it strong. Those kindergartners in whom this attitude is pronounced find ever increasing satisfaction in Froebel's writings — so sure is he, and so intimately has he entered into mysteries that ever draw them on. For them Froebelian doctrine becomes a religion. The Froebel cult accordingly appears.

If we confine our attention to the general statement of Froebel's thought and idea, the pedagogical purpose of the Mother Play book is sound. It is essentially an effort to note the child's instinctive reactions and to utilize these to the realization of the social ideal. Play, the natural play of childish nature and endeavor, is to serve as medium both for discovering to the observer the natural interests and for leading these to their proper social goal. No statement of educational method — at least for the tender years — could be sounder or more attractive. So pleasant would be the task of elaborating the many valuable ramifications of the doctrine that one could wish this were an idea new to the educational world to be treated here for the first time.

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But when we ask how Froebel meant the book to be used in furtherance of this general purpose, the prospect changes. Doubts and uncertainties arise. Froebel says the book is "for the very first training of the child, that is, for mere babyhood; influencing and training the child's body, his limbs and senses, as well as his soul, his mind and his whole inner nature" (6: 250). An examination of the book itself will disclose many evidences of this purpose. The many finger plays point to infancy. "Pat-a-cake" goes back to the babe in arms. In the play of the "Weathercock" (represented by the baby's outspread hand), it is specifically stated that "your child cannot speak yet" (3: 132). We may agree then — as all do — that in one of its aspects the book is designed for "mere babyhood."

But it contemplates also older children. Froebel hoped, even while the book was preparing, that it might be "handed down from mother to children's children as the book of the family" (6: 123). He meant that it should be a picture book for the child at the age "where

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he enjoys passing from anything to the picture of it " (3:124). Just how old Froebel thought this would be is not easy to say, but from many considerations we need not hesitate in supposing that the book is designed to influence children appreciably beyond the kindergarten age.

Use of the Mother Play book. — What relation has the book to the kindergarten? In practice, as stated above, orthodox Froebelians have differed. Some have in effect eliminated the "mother plays" from kindergarten procedure. Others have made them the basis of a large part of the kindergarten program. What was Froebel's purpose? The name and his well-nigh universal reference make the book one for mothers rather than for kindergartners. He did say that the book should form "the basis of kindergarten teaching" (6:311); but this probably means no more than that the same principles hold of earliest childhood as of the kindergarten age. Its use in American kindergartens has probably been due to the feeling that the homes did not supply the nurture

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contemplated in the Mother Play book, while, besides, the games suggested in it supply an important element otherwise scantily provided in the Froebelian program.

Froebel's proposed method of using the book can be illustrated by the "Weathercock," one of the better plays. When the child is yet a babe in arms, unable to talk, he is taught to flatten his hand and hold his thumb up so as to represent the cock of the German weather-vane. This may seem a very simple game "yet it gives your child pleasure — fresh pleasure every time, and it is a long time before it ceases to do so. . . . Only see with what pleasure, but with what seriousness he moves his small hand when you invite him by saying, 'show me what the weathercock does!'" (3:132).

What now is Froebel's purpose in this play? "Have you not noticed," asks Froebel, "that when you move an object before a child so that the motive power is somewhat distant from the object, it gives the child more pleasure to seek the cause of the movement than to

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look at the moving object?" In Froebel's opinion, "it is the same thing here; it is the feeling and controlling the reason of a consequence, the cause of an effect, which makes your child look so serious as well as so happy. . . . He is giving a practical representation . . . that a moving cause, a moving power, is the secret of the object's moving at all." This then is Froebel's purpose, namely, that the babe come to the conclusion that "a living, lively, and enlivening force is at the bottom of the living, lively object" (3:132 f.).

We may for the moment postpone the use of the "Weathercock" for older children, while we look at the psychology of this account as given by Froebel. That the child will acquire and enjoy such movements is too well known for any one to question. That he does also look in a childish way for causes of movements and does himself enjoy — later on — being the cause of a movement, — these are undoubted. It is further quite certainly true that the child's experience in seeing objects move and in himself initiating movements

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furnishes essential conditions in the formation of his concept of a living body. In this particular case we may well question whether the babe's pleasure in moving his hand at request is the same as his later pleasure in causing effects. So that we question whether this particular infant play, in the way here explained, is tending very directly to develop in the child's mind the concept of a living force at the bottom of manifestations of life. But let this objection pass, suppose that it does so act. And let us not stop to question the scientific accuracy of the concept sought by Froebel. We may, however, very properly question whether the mother or the kindergartner need at the tender years before six trouble to direct the formation of such concepts. In so far as such concepts are desirable they will most probably take care of themselves in an ordinarily rich child life. Upon the concepts thus incidently formed may be later built whatever more conscious formulations are then necessary. If the child — without our conscious direction — never got the notion of animate creatures sufficient for

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his needs and for later development, then by all means we should take pains to see that he has the opportunity. His associations with humans will, however, pretty well supply all that is needed. Playing with pets and watching other animate life will do the rest. Such opportunities the child should have. Greater consciousness on the part of mother or kindergartner of what concept formation is taking place along this line might be dangerous, especially so if she has the Froebelian idea that the more she is conscious of the ultimate concept to be attained by the child, the better he will attain it. The danger is that the greater consciousness in the older mind will manifest itself in pushing adult formulation upon the child's mind. Priggish precocity would under such circumstances naturally, if not inevitably, result.

But the "Weathercock," as other "mother plays," concerns also older children. "On a rather windy, almost boisterous day," says Froebel in words addressed to the mother, "your dear children go with you to the drying

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ground in front of your house. Here they see, as the picture shows, many manifestations of the power of the wind. The vane on the church tower creaks ; the linen hung out to dry flaps in the wind ; a pennant improvised by the boy waves on high ; the windmill claps noisily. ' Mother ! isn't the wind very strong to-day ? . . . Where does the wind come from, that moves everything in this way ? ' The mother answers, ' . . . There are many things, my child, which we can certainly perceive, but cannot see. . . . Your hand moves, but you cannot see the power that moves it . . . later you will see more and more where it comes from ' " (3:133 f.).

Clearly Froebel is suggesting to the mother to use the ordinary phenomena of life as the basis of concept formation. As so stated, no better outside direction can come to children. The pictures in the Mother Play book are evidently designed to guide the mother as well as the child to the study and utilization of such phenomena. The general notion is most excellent. The particular conceptions that Froebel wishes to bring to consciousness in the

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child's mind may, however, be open to question. Some are better than others. Scientifically, we may question in the case at hand whether we wish to say much about "forces" back of phenomena. The terminology belongs rather to the past. To those, however, who conceive of God in this spiritualistic fashion, this particular concept will appeal more strongly.

Symbolism in the mother plays. — To many it will seem that Froebel has in the different mother plays, as elsewhere in his writings, made too much of the symbolic and metaphoric. The lamp and the oil mill in the "Kicking Song," too involved to be explained here, are particularly bad. The baby's representation of the weathervane has no very justifiable pedagogic connection with winds in spite of the evident adult association. So the child's waving in "All gone" is made the text of a lesson to the older children that "if people want to keep things, they must be economical and careful wherever those things are concerned" (3:135). The waving "all gone" may be all right for the baby; and care is

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good for the older child; but the connection between the two is certainly not the kind to be sought in children's thinking. So the "Taste Song," which begins with tasting ripe plums and sour apples, includes in the commentary "especially the improvement of the sense of taste in its transferred moral meaning as well." "Who likes to be accused of having 'common and low taste'?" (3:136.) "Tick-tack," which consists of the child's using his arms for a pendulum, is announced as being "a movement for the arm and its formation"; but Froebel adds that we will "use our little limb games for the purpose of training our dear child to heed time" (3:139). No one would question that for the babe swinging the arm is a good enough exercise; and certainly the babe grown older needs to "heed time," but to put these two things together is little short of atrocious. Of course Froebel could do it because he believed, as he says in connection, that at the bottom of the child's interest in timepieces lies "a deeply slumbering premonition of the value of time." An absolutely astounding belief!

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One of the worst of the metaphorical instances is "The fish in the brook." This is represented in the baby stage — "its outer form" — by a child's imitating the swimming of fishes by the movement of his fingers. The movement is probably a good one for the fingers. To name it to a baby as the "swimming of fishes" may be doubtful, but let that pass. This simple movement game leads to the astonishing assertion that a child tries to catch the flying bird and swimming fish in order to "gain from both the free and eager power of moving himself, and guiding himself in what is clean and clear." Such catching, however, will be in vain. "It is from within that freedom must be won. . . . Try, Mother, to bring this near to your child, even though it be at first as the faintest notion. . . . To this end use your child's early delight in what is clean and clear, and in joyful excitement and merry movements." Could anything be worse? A child is joyfully running and skipping. He tries to catch a bird in the air or a fish in the brook. The mother must seek to use this in such way as

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to give him a notion — faint though it be — “that from within alone can the fresh and pure atmosphere be attained”! (3:144.)

Nor is this all. In the picture accompanying this in the Mother Play book, “crooked and straight” is a pronounced feature. “The fishes are swimming straight and bent, the water is flowing straight and curved, the tree is growing straight and bent, and round the straight slim Arum lily (calla) the serpents are dismally wreathing.” Does the reader wonder what all this may mean? “If you have thus early given your little child an abiding impression of the difference between straight and crooked, of dreariness in the feeling of crookedness, and of comfort in the feeling of straightness in action and life, in thought and speech, then directness and all that goes with it will be the mark of all he does, and he will move freely and joyfully in the right use of his well-developed strength, . . . just like the merry fish in the brook”¹ (3:145).

¹ Let no apologist claim that such extreme positions of Froebel have no effect on his orthodox followers. It is no uncommon task for these

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In practice the kindergartner who uses the Mother Play makes a combination of the baby aspect of the several plays with the parts meant for the older children. The children use the finger play meant for the baby and sing the song meant to "adumbrate" the meaning. The kindergartner then, according to her training and insight, makes application of the "principles" found in Froebel's explanations. By a very curious oversight Froebel failed to arrange the plays according to the order of child development, or even according to any discoverable order. Moreover some few of the mother plays discuss topics which American kinder-

to have their students in training study the Mother Play pictures for all their symbolism. One such student has told me of her failure, confessed at the time, to connect with the rest of the picture a little open pod lying at the bottom of the fourteenth picture. When her paper was returned, it had been marked off severely for this failure; and she herself was sternly taken to task for speaking "flippantly" of the "germinal seed" whence had sprung a vine important in the picture. In this particular school two years of study is put on the Mother Play. As a further instance of the same attitude, a kindergartner told me how she used the mother plays, illustrating with the "Light Bird" (a reflection of sunlight cast by a small mirror). Several children tried in vain to catch the light. Finally one little fellow gladdened her heart by saying, "We catch it by looking at it." This she felt had been a triumph. Such precocity is the result aimed at and approved by those who follow the mother plays in the Froebelian spirit.

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gartners as a rule do not care to bring before their children. So that selection and arrangement are necessary in the utilization of the plays. Froebel's oversight in these regards doubtless brings painful questioning to the extremest followers of the cult, but the oversight is there and will not be explained away.

“Pattern” plays. — Closely connected with the problem of the Mother Play is the question of the so-called “pattern” or typical plays. Into the rather heated discussion over this question one hesitates to enter, especially since Froebel himself seems not to have thought of his plays in quite this fashion. But the contention of the “pattern play” advocates is so thoroughly Froebelian in spirit that the topic cannot be entirely disregarded. When Froebel made his collection of games he naturally used materials at hand, only modifying them to suit his theories (6:94). Many of the games thus utilized were so closely connected with the life of the times as to afford to the children playing them an appreciable insight into the conditions of adult life about them. In so far they met

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an essential demand of educative play. When, however, the kindergarten was brought from conditions of German peasant life to its new home in the cities, particularly of England and America, institution and situation were no longer related in the same close fashion. Plays that in Germany had been vitally connected with everyday life now found no explanation in what the children saw in the home or on the street. Notwithstanding this altered relationship, the relatively static and conservative character of the kindergarten tradition prevailed, and many of the original plays were continued with a minimum of modification. This was especially true of those activities associated with the "mother plays." In time, however, serious question arose as to the wisdom of using the German games, and not a few kindergartners frankly advocated games founded on materials furnished by the immediate environment of the city.

To this the traditionalists made answer, partly from conservatism, partly from Froebelian theory, that the plays in question, while

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they did by chance come from the small German village of a half century or more ago, nevertheless were general and typical, and hence could best introduce the child into the complex life which had developed from the simple life exemplified in the plays. Thus the city child who in mimic motion rakes the hay, feeds the cattle, and milks the cow is from this point of view being introduced by type and symbol into an appreciation of the economic interdependence pervading our complex modern society.

It is impossible not to sympathize in some measure with both sides of the controversy. On the one hand, the presumption is certainly against expecting much social insight to come from plays where the life conditions represented have not been rendered vital by at least some first-hand contact. The fundamental law of apperception forbids. If the child has never seen a knight nor heard understandingly of knights, playing knights will afford no valuable introduction to knighthood nor to any later development from it. He may enjoy the game,

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and enter into it with zest; but the knightly element is lost on him. A child will sing "Oats, peas, beans, and barley grow," and play the game with great enthusiasm; but he is getting no insight into agriculture as the mainstay of the economic world. In fact he will transmute the original agricultural statement into "Old sweet beans and barley grow"; but what cares the child? It is the singing and the game he wants, not the meaning of the words and even less the adult significance of the game.

On the other hand, there are games that come nearer to giving an understanding than those mentioned just above. The reference to the cow and the hay is an example. A child who has never seen hay nor a cow may be led by picture, description, and dramatic gesture a certain way along the road of understanding the chain which connects farmer and hay with baby brother and pasteurized milk. Words and other such signs of experience may and often do prepare the way for a later appreciation; but the procedure requires careful con-

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sideration. To give the sign before a knowledge of the thing signified, while to a degree possible, is so easy a sin that from Comenius to now no shortcoming has more required to be preached against. It may well be called the besetting sin of teachers.

The conclusion then regarding "pattern plays" seems clear. If they are attractive to children, their "pattern" character need not damn them. It will probably do no harm. They stand or fall as other mere games. If, however, they are introduced in the hope that the child will, through them, apart from previous apperceptive experience, be led by the symbolism to a later appreciation of the social significance involved, then we may seriously question their worth. Learning for later appreciation is so easy to be overdone that careful educators are chary of encouraging it. If, besides, the kindergartner strongly believes in such anticipatory symbolic learning, she is almost certain to anticipate conclusions for the child. The meanings will be pushed upon him. Adult formulations will be sought and ap-

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plauded when got. Results got under such conditions are more likely to savor of glibness and conceit than of real growth. Froebel himself encourages the kindergartner in such faults. In a pertinent discussion he says explicitly, the child "must have some anticipation of the thing itself [*i.e.* of the deeper meaning supposed to be present], or the game would give him no pleasure" (3:146*). Merely to label such a statement as false and absurd is not sufficient. A book which teaches such a doctrine should be most carefully used; and games based merely on the principle under discussion should be eliminated. Every "pattern play" is perilously near the danger line; nice scrutiny of purposes is necessary in order to choose the good and reject the bad.

We may conclude then of the Mother Play book as a whole that it is not a safe book to put in the hands of mothers or of kindergarten novitiates. They would surely be misled if they followed its teachings, either in letter or in the spirit intended by Froebel. Symbolism and the *outré* metaphorical are too inextric-

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ably interwoven with the better elements of the book for us to hope that any learner could disentangle them. That the kindergarten has got profit from the book may well be admitted; that the intelligent kindergarten leader may yet get suggestion from it is possible, but it seems reasonably clear that the rank and file of practical kindergartners had better spend their time exclusively on more valuable books.

Nature study in Froebel. — The study of animals and plants, of out-of-doors nature in general, has nowadays come to be an important part of school life. Nothing lay closer to Froebel's heart. His advocacy of school gardens is well known. While he devised no specific procedure for developing an interest in animal life, he was nevertheless much concerned that the child should know and love animals, and should grow in and through his play with them. The "Bird's nest," as an instance, is generally counted the most successful of the mother plays. But it was to plants that Froebel's heart especially inclined. Nowhere was he more a mystic than here. Pa-

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thetic is the account given by himself of the shy little motherless boy finding under the hedge the little flower with its five petals and five golden points. For some unknown reason it "riveted my attention more than all the rest; for when I looked down into its coronet, and between the little golden stars, I could fancy I was looking down into endless depths. I have looked into it for hours at a time, during months and years" (3:125). In Froebel's mind this looking was not in vain: "Now, fifty years later, I can see clearly why, as a thoughtful boy, I used to look so longingly into the flower's depths, and it was the Genius of Life who let me dimly see life's depths in it, life's law, and life's meaning" (3:126).

We may be prepared then to find in Froebel's discussion of nature study both mysticism and common sense. It would not be fair to let the presence of the one blind us to the worth of the other. The *Education of Man*, Froebel's first extended book, gives both points of view. What could be saner, more akin to modern prose than this suggestion for boyhood? "Par-

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ticularly helpful at this period of life is the cultivation of gardens owned by the boys and cultivated for the sake of the produce" (1:111). In this way the boy would have a definite objective standard for judging his activity, which should teach him the connection between environment, effort, and result; "he would see his work bearing fruit in an organic way, determined by logical necessity and law — fruit which, although subject to the inner laws of natural development, depends in so many ways upon his work and upon the character of his work" (1:111). And "if the boy cannot have the care of a little garden of his own, he should at least have a few plants in boxes or pots, filled not with rare and delicate and double plants, but with common plants that have an abundance of leaves and blossoms, and thrive easily" (1:112). If Froebel has had no part in creating our current practice, he certainly anticipated it.

Two additional points of view are given in the same discussion: "The child, or boy, who has guarded and cared for another living thing, although it be of a lower order, will be led

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more easily to guard and foster his own life." In a day when extent of transfer from one activity to another is under closest scrutiny, this consideration will not carry as much weight as will the next one: "The care of the plants will gratify his desire to observe other living things, such as beetles, butterflies, and birds, for these seek the vicinity of plants" (1:112). In more modern phrase "motivation" and direction of effort are secured by the problem relation of animal and insect to the more immediate object of interest.

In Chapter I we considered the law of the parallel development of all life; and it was there pointed out that plants are of peculiar value for Froebel for the light they throw on man and his unfolding. "The pure spirit of God not only is seen more clearly and distinctly in nature than it is in human life, but in the clear disclosures of God's spirit in nature are seen the nature, dignity, and holiness of man reflected in all their pristine clearness and purity. . . . Among all objects of nature, none seem in this respect truer, clearer, more com-

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plete, and yet simpler — because of their calm thoughtful aspect and clear unfolding of their inner life than plants, especially trees ” (1 : 159).

Such considerations led Froebel to say elsewhere that “ from every object of nature and life there is a way to God ” (1 : 202), and “ the things of nature form a more beautiful ladder between heaven and earth than that seen by Jacob ” (1 : 203). To enter thus into the kingdom of God, “ man — particularly in boyhood — should become intimate with nature, not so much with reference to the details and the outer forms of her phenomena as with reference to the spirit of God that lies in her and rules over her ” (1 : 162). The educative value of communion with nature may not be equally evident to all, but the caution against mere details of nature study is always wise. Froebel follows this up more wisely yet. Teachers “ should at least once a week take a walk with each class — not driving them out like a flock of sheep, nor leading them out like a company of soldiers, but going with them as a father with his sons, or a brother with his brothers, and

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acquainting them more fully with whatever the season or nature offers them " (1:163).

School gardens. — The foregoing has concerned the youth, not the small child; but Froebel is equally explicit when he comes to the kindergarten. "The kindergarten . . . necessarily requires a garden, and in this, necessarily, gardens for the children" (5:218). A number of reasons are assigned for this, some better than others. Nature is to be considered as "the direct manifestation in action of God, the first manifestation of God." This is, in Froebel's opinion, of especial importance as affording a comparison between the growth and development of nature and the growth and development of man — the parallelism of nature previously discussed. "If now this comparative study is important for man, it is especially important for the embryo man — the child" (5:217). But there are also "reasons of social and citizen collective life." The child must be treated not only as an individual, but also as a member of a greater collective life. "This reciprocal activity be-

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tween one and a few, a part and a whole, is nowhere more beautifully, vividly, and definitely expressed than in the associated cultivation of plants" (5:218). To carry this out fully, there should be a general garden, which the children cultivate in common, and individual beds, the care of several children. In this connection Froebel suffers one of the worst of his lapses into symbolism: The "respective beds of the children must be surrounded by the garden of the whole, as the particular always rests protected in the general, and the general protectingly surrounds the particular" (5:219). But pass this by. In the outlined plan we find a number of very sane suggestions.

"The children . . . should by no means be introduced by this garden into the totality of the vegetable world; but only into the part which most closely touches human needs" (5:220). Both table vegetables and flowers should be included. Personal responsibility is fixed by the provision that "in their own little beds the children can plant what and how they will, also deal with the plants as they

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will, that they may learn from their own injudicious treatment. . . . This will be shown to them by the plants in the common bed, which they must observe carefully " (5:221). The seeds and plants should be so compared and discussed that the children may learn to recognize them readily. Seeds preserved for the next planting should be kept in little paper boxes previously made by the children themselves. The beds should be so labeled as to name plant and child. Through this the child is not only carried along the road towards reading, but receives "the merited silent praise or blame," according as his work has been. Wild plants may be used each third or fourth year to increase the child's knowledge of these.

While many would differ, on this point or that, from Froebel's presentation of nature study, it must be admitted, on the whole, that the good preponderates, and the useless is easily dropped out. The spirit of the discussion is distinctly good. It seems impossible to doubt that here as truly as anywhere else Froebel has helped to bring better things to the child life.

CHAPTER VI

CONCLUSION

WE have now passed in review the chief of Froebel's kindergarten teachings. Good and bad elements have been found. In order that the detail of argument followed may not obscure the conclusions reached, it will be well to assemble in compact form the principal of these conclusions. For the purpose at hand the more philosophical aspects of Froebel's doctrine need not be reconsidered. We are here concerned with those elements of his system which more immediately affect the practice of his followers. The final conclusion may be more satisfactory, if we begin with the rejected elements of Froebel's system.

Unsatisfactory elements in Froebel's system. — The "law of opposites" we found to be for Froebel "the fundamental law of the universe" and the foundation of the "whole

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meaning of his educational system." Neither of these positions could we allow. The scientific student of the universe knows no such law ; and Froebel's method — save in its indefensible aspects — is in fact independent of this pretended principle.¹ Far better that the practical kindergartner never so much as heard of the "law." Its usefulness is nil or worse.

Of much greater worth is Froebel's discussion of development. Although he erred in considering this merely as the unfolding of a content all the while present in the germ ; still even in this erroneous form the doctrine marked a distinct advance. In accordance with this point of view, the early period of the child's life must be considered as uniquely necessary to the full realization of his potentialities. Accordingly the young child must be allowed to live out fully this period and on the child plane. As so stated the theory proves attractive, especially in contrast with the opinion then widely prevalent that the child is naturally

¹ The simultaneous teaching of certain paired opposites is only an apparent exception to the statement just made.

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bad and must be repressed. The difficulty is that Froebel's theory values the child's life not because it is life, but because it alone leads to life. Our best thought now values the early period from both considerations. In itself, childhood is life; as a part of the whole it prepares for what is to follow. A further and more evident objection to Froebel's theory of development is that it places the element of selection within the child's native endowment instead of in the social situation. Many of the child's natural impulses in their direct form are not immediately suited to present-day social life. Society must select; but to this selection, development as mere unfolding must fundamentally object. In thus criticizing development we criticize Froebel's doctrine of child liberty; for the two, as he treats them, are but obverse sides of the same process. It is true that Froebel admitted and advocated guidance, and this is nothing but social selection. But this selection is opposed to "complete" unfolding, so Froebel merely held to both without reconciling the antagonism. Froebel's position

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on development is at best a halfway house. It marks an advance upon the preceding practice of repression; it values childhood, but rather as preparation and promise. It fails to provide adequately for selection and hence leaves us without a guide in the difficult matter of child liberty.

A most striking corollary of Froebel's notion of development is his doctrine of innate ideas: "Did it not lie in the child, did it not live and work in the child, did it not already define the child's life, it could by no means come out from it at a later period" (4: 94). Some of Froebel's most unacceptable statements appear as illustrations of this belief, especially in connection with symbolism for which the innate idea furnishes the basis. The child is later to know himself as a unified spiritual whole; the dim presentiment of this idea accordingly lies already at work in his mind and inclines him to play with the ball because this symbolizes the whole. We found a belief in the efficacy of such symbolism — strange as it may be — permeating the whole of Froebel's kindergarten

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procedure. The gift series is symbolic through and through; purpose, derivation, method of use, supposed effect — all are based so completely on symbolism that if this be rejected, the series crumbles, and its prescribed use becomes hardly more than a superstition. The very movement games were arranged for symbolic effect — fortunately the child can ignore it. The mother plays are almost as thoroughly symbolic as the gift series. Even the morning circle and the garden beds cannot escape. Every specific kindergarten activity, as devised by Froebel, is in some way symbolic; and the more numerous such connections, the more valuable in his eyes.

We conclude with reference to Froebelian symbolism that every vestige of it must be eliminated from the purpose of the kindergarten; and his original practice thoroughly made over to meet the demands of a sound psychology. The gift series as such must accordingly go, and with it most of the gifts and occupations. Some of the materials will remain, changed in size and form. The use will,

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on the whole, be very different. Children will play with these and other toys in childish ways for personal purposes and not from dictation. The ball will never be thought of in connection with unity, nor the cube with multiplicity. That the block occupies space will be no concern of the kindergartner. The child will use this fact, but he will never think about it — still less name it. His imagination will come into play to meet a difficulty, and not be artificially called out as an exercise in faculty psychology, nor as sugar coating for the consideration of an otherwise uninteresting "gift." No regard for Froebelian "sequence" will ever again cause the White House to develop from the Capitol. The very idea of this formal sequence will be utterly abhorrent. Nor need all of the given material be joined in one construction; a truer unity of purpose will displace such a mechanical conception.

The use of Froebel's writings. — Because Froebel's writings are so filled with symbolism and other mistaken psychology, we conclude that the wise training teacher will no longer

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use them as textbooks. Froebel's name will properly be honored, and his memory will be revered; but only carefully selected passages from his books can be assigned, and this rather for the older students. Such an opinion will doubtless be more difficult of acceptance than the other conclusions here reached. The training teacher, because she has got so much of her own preparation from lectures on the Mother Play, will wish to continue its use. But she forgets that the instruction given her in this way was in greater part first read into the Mother Play, and then deduced for her benefit. Shorn of their infallibility, Froebel's books will be less well adapted to such treatment. To the emancipated mind the crudities will continually increase. The opinion here expressed seems the inevitable conclusion.

It may well be asked how a system such as we have just rejected could have made so great a stir in the world. Has the investigation been really impartial? Can the judgment expressed be accepted as final? Several things may be said. First, the review is not yet complete;

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a better side remains to be told. But many have praised Froebel because they could accept all, even what has here been rejected. They have known too little of other educational thought. Again, partial Froebelians, accepting and applying his doctrine of development, have read back into his time everything subsequently achieved. By the further step of giving him personal credit for what was in the *Zeitgeist*, they thus deduce from him all our educational progress. Ignorance, error, and partiality thus explain much of Froebel's reputation. But after every subtraction has been made, the principal foundation of Froebel's fame still remains in the actual contribution made. Much of this has been so thoroughly accepted as now to excite no comment, and consequently to lack that availability for discussion which is found either in novel theory or in widely accepted error. There was a time, however, when Froebel's contribution was to the popular mind novel in the extreme.

Strong points in Froebel's system. — Froebel's strength is perhaps greatest in his love for and

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sympathy with childhood. Rousseau in theory advocated the same, but his personal practice was far different. Pestalozzi perhaps stands next to Froebel, but still below him. More than any other of his time Froebel respected the individuality of the child. Against the common public opinion he rejected entirely the doctrine of total depravity. For him the child's natural interests are proper and worthy of all fostering. Play in his system first got practical educative standing. Following this, manual and constructive activities were emphasized. Initiative received special attention. Intimately associated with this is his doctrine of self-activity, which, divested of his peculiar metaphysics, comes wonderfully close to the best modern doctrine of interest. If "impression" was given its rightful place by Pestalozzi, it was Froebel who first emphasized "expression": "For what man tries to represent or to do he begins to understand" (1: 76). As conscious means to this end he utilized building, drawing, modeling, and singing.

One of Froebel's strongest positions is his

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insistence upon social relationship. On this Rousseau had gone widely astray. Pestalozzi was better; but Froebel's grasp was far superior. For him the child has a natural inclination to social intercourse, and can reach his "destiny" only in and through social relations. The kindergarten and school must take these facts into account and consciously provide opportunity for growth in sociality through actual participation in social life. Even before the child should come to the kindergarten, the family had furnished the first social group, babe and mother in this respect being alike objects of Froebel's thought. The kindergarten and school, in fact, were but to continue on a broader plane the child's social life already begun in the family. Here, as everywhere else with Froebel, unity and continuity were to rule.

Froebel's appreciation of the esthetic elements in human life found practical expression in the kindergarten program long before the ordinary primary school had dreamed of such a thing. His interest in nature study and school gardens preceded our modern practice. His

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rejection of formal religious and catechetical instruction put him ahead of his country, even to this day. His conception of an educational program not based on books is most instructive. Even rejecting the gift series, it still remains that Froebel saw education in far larger terms than the mere memorizing of set intellectual tasks or even the acquiring of the formal school arts. As the embodiment of this vision, the kindergarten will remain a permanent monument to an epochal step in the history of education.

Perhaps the most valuable of all is the practical demonstration which Froebel through the kindergarten has given the world of how happy a group of children can be when engaged in educative activity. The older notion and practice denied the general possibility of such a thing. True enough, in every age there had been exponents of a gentler treatment, but the common practice was all the while sternly prescriptive. For Alcuin, "it is the scourge that teaches children." With him Dr. Johnson agrees: "My schoolmaster beat me most un-

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mercifully, else I had done nothing." The last named thus lays down the then controlling theory: "Children being not reasonable can be governed only by fear. To impress this fear is therefore one of the first duties of those who have the care of children." How markedly does Froebel stand in contrast to all this. We need not accept his discussion of the divine effluence; we can reject his theory of development; but as a definite tangible example of how children can and do work happily, Froebel's kindergarten stands as "a city set on a hill." This is not to claim that his predecessors did nothing. They too deserve praise. However, let one but contrast the "infant school" of the early nineteenth century with the kindergarten, and the difference between Froebel and his forerunners will be made evident. In the infant school the lot of the child was happier than beforetimes it had been, but note Wilderspin's admonition, "it must not be counted a sin for a lively girl to laugh on the playground"; and the superiority of the kindergarten stands clear. Recall too the song used by the girls in

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certain American infant schools as they marched into the schoolroom each morning :

“We’ll all take our places, and show no wry faces.
We’ll all say our lessons distinctly and slow.
For if we don’t do it, our teacher will know it ;
And into that corner we surely must go.”

They sang as they marched in, and that was an improvement ; but note the “ wry faces ” which had to be forbidden, the lessons recited by rote memory, the stern eye of the teacher, the punishment corner, and the general background of conscious opposition between pupil and teacher. The spirit of the kindergarten is immeasurably superior. And the point is that Froebel made an institution which could be multiplied at will, and still show the same joyous activity on the part of the children, and the same tender care on the part of the kindergarten. While this institution has been (so far) confined to children below six, it is still not too much to say that in Froebel education made a complete about face.

Will the institution of such vision and such possibilities be able to slough off its old shell

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of symbolism, fixed "gifts," prescribed program; and live with finer democracy a better life of spontaneity and child mindedness? Can the kindergarten consent to lose a separate life in order to find again a wider life in one common educative process? Will the kindergarten, if the need come, be willing to give up even its distinctive name? Already have kindergartners, neither few in number nor weak in influence, answered these questions in the affirmative. Merged with the elementary school, the kindergarten will give to the primary grades the best of its spirit. But in thus losing separate existence, Froebel's kindergarten will continue to live yet more abundantly.

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¹ A quotation introduced by the translator, for which the original was not found.

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¹ The editor of this edition, Herr Seidel, has here changed the original. For the basis of the quotation see Froebel's *Gesammelte pädagogische Schriften*, herausgegeben von W. Lange (Berlin, 1863), I. 2. 249.

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¹ It is not clear that Froebel used the words attributed to him by the translator in 9: 177.

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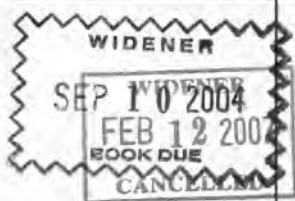
CHICAGO

SAN FRANCISCO

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